Preexit Benefit Receipt and Employment Histories and Postexit Outcomes of Welfare Leavers

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The enactment of time limits, work requirements, and sanctions, among other rules of the Personal Responsibility and Work Opportunity Reconciliation Act of 1996 (PRWORA), caused many observers to wonder how welfare recipients would respond: Would they leave welfare? Would they find jobs? Would they face hardship or would their economic and family situations improve? These questions prompted numerous studies of "welfare leavers," or those who stopped receiving welfare benefits.

Most of these welfare leaver studies were conducted for monitoring purposes—to inform policymakers and program administrators about the needs and experiences of those who had left welfare. However, some were conducted with the goal of assessing the effectiveness of the reforms; that is, they intended to assess whether the reforms caused those who left welfare to be better off or worse off relative to a comparison group. To make this assessment, the studies usually employed a before-and-after research design, comparing outcomes of welfare leavers before they left welfare to outcomes after they left welfare, or a multiple-cohort design, comparing outcomes of a cohort of people who left welfare prior

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to the enactment of PRWORA to outcomes of a cohort of leavers who left welfare after enactment of PRWORA. Both of these designs have weaknesses in drawing causal conclusions.¹

Factors outside of welfare, such as the economy, may also change and affect the outcomes of welfare leavers, making it difficult to assess whether outcome changes are due to the reforms or to the other factors using these methods. Another weakness of these methods is that the characteristics of the people leaving welfare at the time of the study, or at the time the cohorts are drawn, may be driving changes in outcomes. For example, if a cohort of leavers is drawn when the caseload is relatively small, the leavers may be comprised primarily of those who have the most barriers to leaving welfare, such as substance abuse, very young children, or little work experience. Their outcomes after leaving may be much different than the outcomes of a cohort of leavers drawn when the caseloads are relatively large, since this cohort may be composed of leavers with fewer barriers to self-sufficiency. This second problem of the composition of the caseload is also a problem even if the leaver studies are only used for monitoring, and not evaluation, purposes. For example, a monitoring study may be conducted to roughly quantify the need for child care services of those who leave welfare. Those who leave welfare in a time when caseloads are just beginning to drop may be able to leave because they had an easy time securing child care, while those who could not easily find childcare may not leave welfare until much later. It would be hazardous to base conclusions about the need for childcare from any single cohort of leavers if one does not know much about that cohort of leavers.

The National Research Council report (1999) suggested that as a crude means of standardizing descriptions of the caseload and the outcomes of leavers across time and across areas, outcomes could be stratified by the past welfare receipt history and past work experience of welfare leavers. Standardizing the composition of the caseload and the groups of the leavers would then make comparisons of outcomes of leavers across time and jurisdictions more credible because leavers with similar work and welfare receipt histories would be compared to each other. The purpose of this paper is to classify characteristics of welfare leavers and stayers and their outcomes by their preexit benefit receipt and employment experiences to illustrate one method the leaver studies might use to standardize their results to make comparisons across time and jurisdictions more credible. No attempts to make causal attributions are made in this study.

The second section of this study describes the data used. The third section examines the past welfare receipt, employment, and earnings histories of the caseload of AFDC recipients in 1995. Section 4 examines whether and how much welfare leavers work and earn after leaving, whether they return to welfare or use

¹See NRC (1999, 2001) for a more detailed discussion of these weaknesses.

other public assistance after leaving, and how self-sufficient they are after they leave. In discussing each of these outcomes, results are presented separately across different types of welfare leavers based on their past welfare receipt and work histories. This section also examines the outcomes of cases classified as "high-barrier" leavers—that is, those who face multiple barriers to gaining self-sufficiency. The outcomes of this group are presented in an attempt to estimate a lower bound on outcomes of leavers. Section 5 examines the importance of past welfare receipt and work history measures in a multivariate setting. Probit models of the probability of leaving welfare and of being employed a year after leaving welfare, controlling for welfare and earnings histories, as well as demographic characteristics of leavers, are estimated. Tobit estimates of post-welfare earnings, controlling for welfare and work histories and demographic characteristics also are given. The coefficients from these models are then used to predict outcomes of different high-barrier groups to assess how cases with multiple barriers to self-sufficiency fare after leaving welfare.

This study was undertaken as part of a set of papers that explore the importance of caseload composition factors for outcomes of welfare leavers. Moffitt (this volume: Chapter 14) uses the National Longitudinal Survey of Youth data from 1979 to 1996 to describe the welfare receipt and employment experiences of young women ages 20-29. Stevens (2000) uses AFDC and Unemployment Insurance administrative records from Maryland and draws multiple cohorts of leavers across time periods. The past AFDC and work histories of these cohorts are described and employment outcomes after leaving welfare are compared across cases with different welfare receipt and work experience histories.

This study also builds on a series of papers on AFDC leavers in Wisconsin that has been conducted by researchers at the Institute for Research on Poverty at the University of Wisconsin-Madison.² These reports have examined employment, earnings, and benefit receipt after leaving welfare for a cohort of July 1995 AFDC recipients who left AFDC in the following year.

DESCRIPTION OF THE DATA AND KEY VARIABLE DEFINITIONS

Data for this study come from the Wisconsin Department of Workforce Development CARES system, which contains information collected through the administration of AFDC and other means-tested programs. These data were matched to earnings and employment data from the state's UI system. All persons in the data used in this study received AFDC benefits in Wisconsin in July 1995. These cases were tracked with linked administrative data from January 1989 until December 1997, providing up to 9 years of data for each case.

²See Cancian, M. et al. (1999); Cancian et al., (2000a); and Cancian, M., Haveman, R., Meyer, D.R., and Wolfe, B. (2000b).

Who Is in the Data Set?

Every observation in the data set received AFDC-Regular (for single-parent families) in July 1995. The entire caseload at the time numbered 65,017. The following types of cases were eliminated from the data, with the number of cases eliminated (nonsequentially) with the restriction in parentheses:

- (1) Cases that were open in July 1995 but did not receive any benefits (n=397).
 - (2) Cases where there were no children 18 or younger in July 1995 (n=843).
- (3) Cases where all eligible children in the case are being cared for by a not-legally responsible relative (n=6,101).
 - (4) Cases where there are two parents (n=907).
- (5) Cases where a case head is a teen mom—meaning there is an eligible adult under the age of 18 (n=47), or there is no eligible adult and a child is the caretaker (n=254).
- (6) Cases involving a large family or two conjoined families where a single case head is unidentifiable (n=138).
 - (7) Cases for which UI data were not requested (n=47).
 - (8) Cases where the case head is over 65 years old (n=83).
 - (9) Cases with a male case head (n=1,888).

After eliminating these cases, the data set contained 54,518 cases; this is the data set used by Cancian et al. (1999). We further eliminated cases under the age of 21 in 1995. Because we were able to obtain data on AFDC receipt back to July 1989 and UI earnings reports back to January 1989, those under age 21 were eliminated because they were under the age of 15 in 1989 and not reasonably expected to be on AFDC or working. After eliminating these cases, our final number of observations is 48,216.

Definition of a Leaver

A welfare "leaver" is defined as a case that received AFDC in July 1995 and, over the course of the next year (until August 1996), stopped receiving benefits for 2 consecutive months.³ "Stayers" are those who did not stop receiving benefits for 2 consecutive months during the August 1995–August 1996 period. This period is referred to throughout the paper as the "exit period." The "preexit period" is between January 1989 and July 1995. The "postexit period" for a leaver begins in the quarter the leaver exited welfare and continues until the last

³This 2-month definition of a leaver was used in Cancian et al. (1999) and is being used by the leavers studies sponsored by the Office of the Assistant Secretary for Planning and Evaluation in the U.S. Department of Health and Human Services.

quarter of 1997. For a stayer, the postexit period is between July 1996 and the last quarter of 1997. Stayers may have left welfare after August 1996 but did not do so during the exit period.

Two alternative definitions of leavers were explored; first, only those who stopped receiving benefits for 3 consecutive months from August 1995 to September 1996 were considered leavers, and a more stringent definition of a leaver considered only those who stopped receiving benefits for 6 consecutive months from August 1995 to December 1996 to be leavers. Caseload composition and outcomes using these definitions are reported in Appendix 13-A. In general, we find only small changes in the demographic composition of the group of leavers under a more restrictive definition of a leaver, that is, one who has stayed off of welfare for 6 consecutive months. The differences in demographic composition between 2-month and 3-month leavers are negligible. Outcomes of leavers change slightly with the more restrictive definition of leavers, as 6-month leavers are less likely to return to welfare and have modestly higher earnings than 2-month and 3-month leavers.

Welfare History Variables

The cases were categorized into groups based on each case's past welfare receipt history. This was done as a means to characterize the welfare caseload at the time the sample of leavers was drawn and as a means to standardize comparisons of outcome measures across different types of leavers. Leavers were stratified into groups using monthly AFDC receipt data from July 1989 through December 1997.4 From these data, spells of receipt were counted. A spell began with 1 month of receipt (preceded by a month of no receipt) and ended with 1 consecutive months of nonreceipt. Those enrolled in AFDC in July 1989 were counted as starting a spell, even though they may have already been enrolled in months prior to that. No adjustment was made for this censored data. A month of nonreceipt surrounded by two months of receipt was not counted as an end of a spell. Rather, it was counted as if the spell continued. We implemented this strategy to ensure that a spell actually ended and that the break in receipt was not the result of administrative churning or erroneous reporting. Some cases continued spells after July 1995 and are right censored. No adjustments for these censored data were made.

The total number of months on AFDC, the total number of spells, and the average spell length in months (total months of receipt divided by number of spells) were calculated for each observation. Using these measures, all leavers and stayers are classified as *short-termers*, *long-termers*, or *cyclers*. Short-termers have average spell lengths of less than 24 months and fewer than three total

⁴Data for November, 1992 are missing for all observations.

spells throughout the preexit period; long-termers have average spell lengths of 24 or more months and fewer than 3 total spells; and cyclers have three or more spells, regardless of average spell length. The exact cutoff points of these classifications are somewhat arbitrary, however, under this definition, long-termers are those who have spent at least a third of the time we observe them on welfare and short-termers are those who have spent less than one-third of the time on welfare.⁵

In general, we expect that short-termers face the fewest barriers to self-sufficiency. We expect that long-termers have the most barriers to self-sufficiency. Cyclers are expected to be somewhere between them. Therefore, we expect that short-termers will be less dependent on assistance and have better labor market outcomes after leaving than long-termers and we expect outcomes of cyclers to be somewhere between them.

The AFDC receipt data only include administrative records from the state of Wisconsin. Some cases may have moved to Wisconsin just before the exit period and started spells then. These may include a mix of long-term, cycler, and short-term welfare users. However, because we cannot track welfare receipt in other states, these cases are classified as short-termers. Similarly, the definitions do not account for the age of the case head (except that all were at least 15 in 1989). Those who are younger have fewer years of "exposure" to welfare and are likely to have fewer and shorter spells compared to older recipients.

Work History Variables

Earnings information from Unemployment Insurance records from first quarter 1989 to fourth quarter 1997 are used in this study. A variable for the percentage of quarters with any earnings in the preexit period was created and used to stratify outcomes (number of quarters from 1989 to 1995 with positive earnings divided by total number of quarters between first quarter 1989 and third quarter 1995). The percentage of quarters with earnings was divided into the following categories to make comparisons feasible: (1) those who had never worked in the preexit period; (2) those who had worked at least one quarter but no more than 25 percent of the quarters in the preexit period; (3) those who had worked more than 25 percent of the quarters but not more than 50 percent of the quarters; (4) those who had worked more than 50 percent of the quarters but not more than 75 percent of the quarters; and (5) those who had worked more than 75 percent of the quarters. Each outcome of interest is also stratified by these categories of work history. Again, earnings records from other states are not available for those who move into Wisconsin. Also, no standardization for the age of the case head was

⁵Alternative definitions were examined and the caseload compositions based on those definitions are reported in Table 13-B1 in Appendix 13-B.

made in this measure. The youngest welfare recipients in July 1995 are likely to have worked fewer quarters than older recipients. Thus, we expect the average age of groups with less work experience to be lower than the average age of groups with more work experience.

Postleaving Outcome Measures

Three types of outcomes for welfare leavers were examined: (1) public assistance receipt, such as whether the case returned to welfare and whether the case received other public assistance benefits (food stamps and medical assistance); (2) earnings and employment after leaving; and (3) total income, from earnings and public assistance benefits after leaving. The entire sample was tracked through administrative records through December 1997. For each leaver, there are at least five quarters of data on earnings and public assistance receipt after leaving.

Outcomes of both leavers and stayers are reported.⁶ Some outcomes are reported relevant to the quarter the leaver stopped receiving AFDC, such as earnings in the first quarter after exit. For leavers, the actual calendar year quarter of these earnings will vary according to when the leaver stopped receiving welfare. For stayers, the first quarter after initial exit is the third quarter, 1996, the second quarter after exit is the fourth quarter 1996, and so on.

Data Limitations

This study relies solely on administrative records from the CARES system and matched UI records from the state of Wisconsin. These data have important limitations. First, only records from Wisconsin are included in this study. If a case moved into or out of Wisconsin, information about the case when not in the state is not available. Second, good information on how many of these movers might be in the data file at some point is not available. Administrative data are available on those in the case unit and not on others who might be living in the same household as the unit. For example, earnings of a cohabitating partner are not available, nor are data on living arrangements. Third, errors may occur during the process of matching the CARES data to the UI data may occur if Social Security numbers are reported erroneously or if there are duplications in the data reported to the UI system from employers. Finally, with specific regard to UI data, not all jobs are covered in the Unemployment Insurance system (for example, self-employed persons or federal government employees) or recorded

⁶Outcomes of leavers who did not return to AFDC in the follow-up period also were examined. As expected, these "continuous leavers" had better outcomes than those who returned to AFDC.

when they legally should be. As a result, some cases that appear to have no earnings may in fact have earnings from jobs. Hotz and Scholz (this volume: Chapter 9) review studies of underreporting in the UI system.

In the Wisconsin data, some cases cannot be tracked with the administrative records from the postexit period (for example, those who move into or out of the state as described). These cases, "disappearers," make up 3.7 percent of the total of 54,518 cases. Other cases appear in some but not all quarters. These "partial disappearers" make up 13.6 percent of the total caseload. Cases that disappear are used in the analysis unless otherwise noted. Cases not appearing in UI records for a quarter are assumed to have zero earnings for that quarter. Cases not appearing in public assistance records were assumed to not be receiving benefits.

THE WELFARE RECEIPT AND WORK HISTORIES

Because of dynamics in policy, economic conditions, and other social factors, the characteristics of those who receive welfare (and leave welfare) at one period may be quite different from the characteristics of those who receive (and leave welfare) at another time period. For example, during periods of high unemployment, the caseload may include many cases that have lots of work experience and have not received welfare very often, but who cannot find a job in a slack economy. On the contrary, during economic booms, these types will probably move into jobs and off welfare, leaving those with the most barriers to employment and self-sufficiency on the rolls. In this section, we describe the welfare receipt and work histories of the caseload of AFDC recipients with a sample of leavers drawn in July 1995.

Welfare Histories of the Caseload in July 1995

Table 13-1 provides the distribution of the total number of months of AFDC benefit receipt for the full caseload overall and separately by the number of spells of receipt during the time frame. (To abbreviate, we call this total-time-on, or TTO.) Column 1 shows TTO for the entire caseload. This column shows that a majority of the caseload in July 1995 received benefits for more than 2 years and that a large portion (nearly 38 percent) received benefits for at least 5 of the 6 years in the preexit period. This is not surprising given that at any point in time, the caseload will be made up disproportionately of long-term beneficiaries. (See Bane and Ellwood, 1994, for a discussion of welfare dynamics.)

The bottom row of Table 13-1 shows the overall distribution of the number of spells of the caseload in July 1995. The majority of cases had only one spell (57.2 percent) and just over a quarter had 2 spells (25.8 percent). The fraction of those with three or more spells is quite small; as only 14 percent fell into this category. Moffitt (this volume: Chapter 14) found that of those who were ever on AFDC of the 10 years of NLSY data used in the study, 48 percent had only one

TABLE 13-1 Distribution of Total-Time-On AFDC in Months Between 7/89 to 7/95 by Number of Spells of AFDC Receipt Over Entire Period (percent distribution)

Total-Time-On		Number	of Spells		
(months)	All	0	1	2	3+
0	3.1	3.1	_	_	_
1-6	4.8	_	7.9	1.3	0.0
7-12	6.7	_	8.9	5.5	1.7
13-18	5.7	_	5.4	7.3	5.2
19-24	6.3	_	5.6	7.7	7.8
25-36	11.2	_	8.6	13.7	19.6
37-48	11.9	_	9.3	13.6	22.2
49-60	12.6	_	8.4	16.5	25.6
61+	37.7	_	46.0	34.4	17.9
Total percent with number of spells		3.1	57.2	25.8	13.9

NOTE: Total number of observations = 48,216.

Maximum number of months = 71.

spell of receipt and only 8 percent had 4 or more spells. Thus, both of these studies show a small amount of turnover in the caseload. Table 13-1 also reports the distribution of TTO by the number of spells of benefit receipt. Of those who had only one spell, 46 percent had a long spell of more than 5 years. The rest of those with only one spell are distributed fairly evenly across the TTO scale. For those with 2 spells, a smaller fraction received welfare for more than 5 years (34 percent). Those with two spells are, however, more concentrated in the categories of 2-6 years of benefit receipt than those with only one spell. Finally, those with three spells of receipt are concentrated primarily in the range of 2-5 years of benefit receipt. Two-thirds, 67 percent, of those with at least 3 spells received benefits for a total of 2-5 years.

Table 13-2 is a slight variation on Table 13-1. Instead of reporting the total number of months of benefit receipt, Table 13-2 reports the average spell length (ASL) of benefit receipt. The first column gives the overall distribution of ASL. There is a cluster (26 percent) of the caseload with an ASL of more than 5 years. However, the majority of the caseload have ASLs of between half a year and 3 years.

The distribution of ASL for those with one spell is the same as in Table 13-1. For those with two spells of benefit receipt, more than half have ASLs of 2 to

⁷ASL was calculated as the TTO measure divided by the total number of spells.

TABLE 13-2 Distribution of Average AFDC Receipt Spell Length in Months Between 7/89 to 7/95 by Number of Spells of AFDC Receipt Over Entire Period (percent distribution)

Average Spell Length		Number	of Spells		
(months)	All	0	1	2	3+
0	3.1	3.1	_	_	_
1-6	7.7	_	7.9	6.8	10.4
7-12	13.8	_	8.9	15.0	35.1
13-18	10.8	_	5.4	13.7	30.2
19-24	10.1	_	5.6	13.6	24.4
25-36	18.1	_	8.6	51.0	0.0
37-48	5.3	_	9.3	0.0	0.0
49-60	4.8	_	8.4	0.0	0.0
61+	26.3	_	46.0	0.0	0.0
Total percent with number of spells		3.1	57.2	25.8	13.9

3 years. For those with three spells, 11 percent have an ASL of less than half a year. An additional 35 percent have ASLs of less than a year. Thus, 45 percent of cases have short spells of benefit receipt on a relatively infrequent basis. However, 55 percent of those with three spells have ASLs of 1 to 2 years.

To capture the two concepts of average spell length and total number of spells in a less cumbersome way, three categories of welfare recipients were created: cyclers (more than two spells), short-termers (fewer than two spells and TTO of less than 2 years), and long-termers (fewer than two spells and TTO of 2 or more years). Table 13-3 illustrates the distribution of the caseload in July 1995 across these three categories. More than half the sample (55 percent) are long-term welfare users. Nearly a third (31 percent) are short-term users, and nearly 14 percent of the sample are cyclers.

Moffitt (this volume: Chapter 14) found about one-third of the women ever on AFDC were cyclers, between 37 and 58 percent were long-termers, and be-

TABLE 13-3 Long-termer, Short-termer, and Cycler Status (percent distribution)

	Overall	Leaver	Stayer
Long-termer	55.3	42.9	66.7
Short-termer	30.8	39.1	23.1
Cycler	13.9	18.0	10.2

tween 23 and 44 percent were short-termers, depending on how these two concepts were defined. Using Maryland administrative data on the AFDC/TANF caseload from 1985-1998 and linked UI data, Stevens (2000) disaggregated the AFDC/TANF caseload from Baltimore City into four birth cohorts and observed each of the cohorts for a ten-year period. He also divided the caseload into the long-termer, short-termer, and cycler distinctions and found more short-term welfare recipients than long-term welfare recipients. About 50 percent of those on welfare during the time span were short-termers while about one-third were long-termers, which is almost exactly the reverse of findings from the Wisconsin data. In another study that used the Maryland data and similar definitions of dependence, but that examined 11 birth cohorts of women, the percent of the caseload that was short-termers ranged between 44-67 percentage, the percent that was longer-termers ranged from 35 to 47 percent, and the percent that were cyclers ranged from 3-19 percent (Moffitt and Stevens, 2001). Except for two birth cohorts, the percent of short-termers was always greater than the percentage of long-termers. The results of the Maryland studies that show more short-termers than long-termers in the caseload compared to results from the Wisconsin data that show more long-termers illustrate the point about compositional factors of different caseloads at different times. Given these different compositions, we might expect Maryland leavers to have better postexit outcomes than Wisconsin leavers who have greater welfare dependency, with all, else being equal.

The Work Histories of the Caseload in July 1995

A principal emphasis of the 1996 welfare reforms was to push welfare recipients into work and work-related activities. Not surprisingly, most studies of welfare leavers focus on the work outcomes of leavers, whether they have and keep jobs, what their wages are, and how their wages change as they work more. As recipients leave welfare, we would expect those with more work experience to have better outcomes. To assess whether this hypothesis is correct, we have classified the entire caseload in July 1995, by the number and percentage of quarters between January 1989 and July 1995, in which the case had nonzero UI wage reports. Table 13-4 shows the distribution of prior work experience. We find that most of the caseload did not have much work experience during this time period. Less than a quarter of the caseload (21 percent) had worked more than half the quarters. Nearly 20 percent had no reported earnings during the time frame, 34 percent had earnings in less than 25 of the quarters, and 26 percent worked between 25 and 50 percent of the time between January 1989 and July 1995.

What is the relationship between work history and welfare receipt history? Table 13-5 shows the distribution of work history across short-termer, long-termer, and cycler status. The table shows that those who cycle on and off welfare have the most work experience. Only 6 percent of cyclers had never worked in the

TABLE 13-4 Work Histories of Aid to Families with Dependent Children Recipients (1/89–7/95)

Percent of Quarters with Nonzero Earnings	Number	Percent
No quarters with earnings	9,523	19.8
0 < x - 25% of quarters	16,369	34.0
25 < x - 50% of quarters	12,269	25.5
50 < x - 75% of quarters	6,770	14.4
More than 75% of quarters	3,285	6.8

preexit period. This is in comparison to 23 percent of long-termers and 21 percent of short-termers. Cyclers are also more concentrated at the higher end of the work experience distribution. A third of cyclers had worked between 26 and 50 percent of the quarters prior to the exit period, 24 percent had worked more than half but less than 75 percent of the quarters prior to exit and 13 percent had worked more than 75 percent of the quarters. Long-termers have the least work experience. Almost 63 percent of long-termers had worked fewer than 25 percent of the quarters. This is relative to 48 percent for short-termers and 30 percent for cyclers. To summarize, short-termers generally had less work experience than cyclers, but more than long-termers. Long-termers had the least amount of work experience. This is not surprising as we would expect those who are the most dependent on welfare to also be the least likely to hold jobs.

Throughout the rest of this paper, the short-term, long-term and cycler definitions of welfare receipt history and the categories of work history will be used to stratify outcomes of leavers and stayers. The distinctions are used to illustrate how the outcomes of leavers can vary by the characteristics of the people leaving the caseload at the time the welfare leaver sample is drawn. These categorizations are also given as an example of a crude means of standardizing outcomes across different leavers studies.

TABLE 13-5 Work Histories of AFDC Recipients by Short-Termer, Long-Termer, or Cycler Status

	Percent	of Quarters W	orked 1/89 to	7/95	
Welfare Receipt History	None	0 to 25%	26 to 50%	50 to 75%	More than 75%
Short-termer	20.9	27.3	21.8	18.4	11.5
Long-termer	22.5	40.2	25.5	9.1	2.7
Cycler	6.4	23.8	33.2	24.0	12.7

THE OUTCOMES OF WELFARE LEAVERS AND STAYERS

Who is a Leaver and Who is a Stayer

Table 13-6 describes characteristics of those who left welfare between July 1995 and July 1996 and those who did not leave during this time period. This time period coincides with the beginning of the very steep decline in the AFDC caseload in Wisconsin (see Cancian et al., 1999). During the exit period overall 48 percent of the caseload stopped receiving AFDC, and 52 percent remained on AFDC. This substantial decline continued through the end of 1997, the last year covered in these data, so that many of the stayers later left welfare.

As expected, leavers are more educated than stayers. About 64 percent of leavers had at least a high school diploma, but only 50 percent of stayers did. Leavers are more likely to be white than African Americans or Hispanic. Leavers are a bit younger than stayers. Stayers are more likely to live in Milwaukee, while leavers are more likely to live in rural and other urban areas of the state. Leavers are also less likely to have a child receiving Supplemental Security Income (SSI), payments as 8 percent of leavers had a child that received SSI compared to 13 percent of stayers. Again, this is not surprising given that having a child on SSI may make finding work or an alternative means of subsistence more of a burden. The youngest children of leavers are, in general, a little bit older than the youngest children of stayers.

In terms of welfare receipt history, as expected, leavers have shorter histories than stayers. Of leavers 39 percent were short-term welfare users in the preexit period compared to 23 percent of stayers. On the other hand, 67 percentage of stayers were long-termers compared to only 43 percent of leavers. Cyclers made up 17.9 percent of the leavers but 10 percent of the stayers. The total percentage of time spent on AFDC in the preexit period is also calculated for leavers and stayers. In general, stayers have spent more time on welfare than leavers. Seventy-four percent of stayers spent more than half of the preexit period on AFDC compared to 56 percent of leavers. As a final measure of welfare receipt history, the average length of AFDC receipt spells was calculated for both leavers and stayers. The mean spell length in the preexit period of leavers was about 28 months compared to 41 months for stayers. This is a substantial difference (46 percent).

Leavers also worked more quarters during the preexit period than stayers, as expected. Although about 25 percent of the stayers had never worked in the period prior to July 1995, only 14 percent of leavers had never worked. Twenty-eight percent of leavers worked for at least half the quarters prior to the preexit period compared to only 14 percent of stayers.

To summarize Table 13-6, as expected, those who left welfare had more education and more work experience than stayers. Over all four measures of prior AFDC receipt, we see that those who were on AFDC longer have substantially

TABLE 13-6 Characteristics of Welfare Leavers (full sample N=48,216)

Characteristics	Full Sample	Leaver	Stayer
Total number	48,216	23,207	25,009
Percent of sample	100.0	48.1	51.9
Race/ethnicity			
% black	43.0	32.2	48.1
% Hispanic	6.8	6.4	7.1
% white	50.2	61.4	44.8
Age of case head			
% <26 years old	36.3	37.1	35.5
% 27-31	24.4	25.2	23.7
% 32-41	31.6	30.9	32.2
% 42+	7.8	6.8	8.6
Education of case head			
% less than high school	43.4	36.1	50.2
% high school diploma	41.4	45.3	37.7
% some college	15.2	18.6	12.1
County of residence			
Milwaukee County	54.3	42.4	65.3
Other urban county	29.6	35.6	24.1
Rural	16.1	22.0	10.6
Percent with child on SSI	10.7	8.1	13.1
Age of youngest child			
% 0 to 1 year	28.2	27.1	29.2
% 2 to 4 years	31.2	31.4	31.0
% 5 to 11 years	29.8	29.7	29.9
% 12 or older	10.8	11.8	9.9
Welfare history (7/89 to 7/95)			
% Short-termer	30.8	39.1	23.1
% Long-termer	55.3	42.9	66.7
% Cycler	13.9	17.9	10.2
Percent of time on welfare			
(7/89 to 7/95)			
$0 \le x \le 25\%$ of time	17.2	23.5	11.3
$25 \le x < 50\%$ of time	17.2	20.4	14.3
$50 \le x < 100\%$ of time	44.6	43.7	45.4
Always on	21.0	12.4	29.0
Mean AFDC spell length	34.6	27.5	41.23
7/89 to 7/95 (in months)	(25.2)	(23.2)	(25.2)
Median AFDC spell length	28	20	35
7/89 to 7/95 (in months)			
% of quarters with earnings			
(1/89 to 7/95)			
Never worked	19.8	14.0	25.1
$0 < x \le 25\%$	34.0	30.0	37.6
25 < x <= 50%	25.5	28.0	23.1
, 5070			
50 < x <= 75%	14.0	17.7	10.6

lower exit rates. Leavers were also more likely to be non-minority and to come from counties other than Milwaukee. Leavers are also slightly younger than stayers. In general, leavers tend to be those who face fewer barriers to leaving than stayers do.

Table 13-7 shows the percentage of the caseload that left welfare by past AFDC receipt and past earnings histories. Again, we see that those who have received welfare for longer periods of time and those with the least work experience are the least likely to leave welfare. The percentage who left welfare by categories of the number of quarters with earnings prior to the exit period are also given. As expected, those who worked the least in the preexit period were the least likely to leave welfare. Of those with no earnings, only 34 percent left AFDC. This is in comparison to 73 percent of those with the most work experience—those with earnings in more than three-quarters of the preexit quarters. In general, the percentage who left welfare increases as the percentage of quarters with earnings increases.

Table 13-7 shows vast differences in the leaving rates for those with previous AFDC receipt and earnings histories. Long-term recipients are likely to be those who face the highest barriers to employment and self-sufficiency, which is probably why fewer leave welfare. Those who have worked little in the past are likely to have a harder time finding employment and are likely to earn less when they are employed. Employment, earnings, further public assistance receipt, and other outcomes of leavers will also vary widely across these AFDC receipt and work histories.

TABLE 13-7 Leaving Rates for Recipients with Different Recipiency and Work Histories

	Percent of Total Sample in Subgroup	Percent of Subgroup That Left Welfare
Past welfare receipt history		
Short-termer	30.8	61.1
Long-termer	55.3	37.4
Cycler	13.9	62.2
Percent of quarters with earnings (1/89–7/95)		
Never worked	19.8	34.2
0-25% of quarters	34.0	42.6
26–50% of quarters	25.5	52.9
51–75% of quarters	14.0	60.8
More than 75% of quarters	6.8	72.5

Public Assistance Usage After Leaving Welfare

A critical goal of welfare reform was to decrease dependency on public assistance. This section examines the use of public assistance by welfare leavers and stayers. Outcomes examined include the percentage who return to welfare and the percentage who receive food stamps and medical assistance after leaving welfare. Outcomes are stratified by past welfare receipt history and by past earnings receipt history.

Table 13-8 shows the percentage of leavers who returned to welfare by July 1997. This table also shows when, relative to leaving, the case returned to cash assistance. Overall, the majority of welfare leavers (71 percent) did not return to welfare within 16 months of leaving. A sizable proportion did not stay off welfare very long, as 20 percent returned within 6 months. Seven percent of the sample returned between 6 months and a year after leaving, and only 2 percent returned between 13 and 15 months after leaving. The percent returning to AFDC within 15 months (29 percent) is higher than what Blank and Ruggles (1994) found using national-level survey data from the late 1980s. They found that 20.5 percent returned to AFDC within 15 months of exiting. In a review of welfare leaver studies from 11 different states and counties sponsored by the Office of the Assistant Secretary for Planning and Evaluation (ASPE) of the Department of Health and Human Services (DHHS), Acs and Loprest (this volume: Chapter 12)

TABLE 13-8 Percent of Leavers Who Return to Welfare by Past Welfare Receipt and Past Earnings History (N=23,207)

	Never Return	Return Within 3–6 Months	Return Within 7–12 Months	Return Within 13–15 Months
Overall	70.9	20.1	7.0	1.9
Past welfare receipt				
Short-termer	76.9	15.4	5.9	1.8
Long-termer	66.5	23.8	7.7	2.1
Cycler	68.6	21.6	7.9	1.9
Past earnings receipt:				
Percentage of quarters with ea	arnings > 0	prior to leaving		
Never worked	76.6	15.6	6.0	1.9
0 < x - 25%	68.6	22.0	7.5	1.9
25 < x - 50%	69.1	21.4	7.7	1.9
50 < x - 75%	72.5	18.9	6.5	2.1
More than 75% of quarters	72.6	19.3	6.1	2.0

found that between 18 to 35 percent of welfare leavers returned to TANF within a year after leaving.8

Table 13-8 also presents the percentage of leavers who returned to welfare by past welfare receipt history and by past earnings history. As expected, those with short receipt histories are the least likely to return to welfare in the 16 months following exit. Only 23 percent of short-termers returned to welfare compared to 33 percent of those with long-term welfare histories. Of those who cycle on and off welfare, 31 percent returned to welfare. Nearly a quarter of longtermers and about a fifth of cyclers were back on cash assistance within half a year after leaving. Only 15 percent of short-termers were back on welfare within 6 months of leaving. This table shows that there are considerable differences in the percentage of cases that return to AFDC across different welfare histories. Cancian et al. (1999) stratified the sample by the length of the case's current spell of AFDC usage, tracking receipt 2 years prior to the exit period and found small differences in AFDC return rates by the length of the current spell. Furthermore, they did not find a clear pattern between spell length and return rates. Cancian et al. (1999) also stratified return rates by the total number of months of AFDC receipt for 2 years prior to the exit period, and found that those who had received benefits for more months were more likely to return. These results are similar to results reported here.

Differences in return to AFDC across work histories are not as large. Surprisingly, cases with no prior work experience were the most likely to stay on welfare. Seventy-seven percent of cases that never worked did not return to cash assistance after leaving. Those who worked fewer than half the quarters before leaving were the most likely to return to welfare. About 69 percent of those who worked between zero and 50 percent of the quarters stayed off welfare. Of those who worked more than half the quarters before leaving, 73 percent stayed off of welfare. The composition of the group with no prior work experience is disproportionately made up of legal immigrants, Asians, Hispanics, and those without an eligible adult in the case. Cancian et al. (1999) found that legal immigrants were significantly less likely to return to welfare. Although no explanations were offered, it is possible that this group was particularly discouraged from returning to welfare by signals encouraging the end of welfare and emphasizing work that came out with the waiver and PRWORA legislation, along with real changes in how the Food Stamps Program treated legal immigrants. Most of the cases with no eligible adults are those where the AFDC case consists only of children, but the adult in the household is either on SSI or was sanctioned from AFDC. Matched UI earnings in these cases are those of the adult, not the child in the AFDC case.

⁸These studies used similar definitions of leavers and similar research designs, but covered different time periods and did not match methodologies exactly. Furthermore, the compositions of caseloads from each study area may be quite different although these compositional differences have not yet been explored.

The mixed composition of this group with no prior work experience as counted by UI records seems to produce other surprising outcomes across work experience as well, which we detail in the text that follows.

Food Stamps and Medical Assistance Receipt After Leaving by Quarters

Tables 13-9 and 13-10 examine food stamps and medical assistance benefit receipt among leavers and stayers. Welfare leavers may change their behaviors for a couple of reasons. Leavers' income also may increase after leaving if they earn more or if they marry, so much so that they are no longer eligible for food stamps. Leavers also may find jobs that provide health insurance. Alternatively, even though food stamp and medical assistance eligibility rules did not change much with waivers and PRWORA, recipients may be confused about the rules and think they are no longer eligible for food stamps or that work requirements and time limits for cash benefits also apply to food stamps and medical assistance receipt.

Table 13-9 shows the percentage of leavers and stayers that received food stamps on a quarterly basis after leaving welfare, or since the third quarter of 1996 for stayers. The first two columns show that the majority of the caseload (90 percent of leavers and 94 percent of stayers) received benefits in the quarter in which they exited. This does not vary greatly across past welfare receipt or work history. However, the percentage of leavers who received food stamps drops off dramatically in the first quarter after exit to 52 percent overall, and continues to drop such that only 37 percent received food stamps in the fifth quarter after exit. Although the number of stayers receiving food stamps also drops through the exit period, most stayers still receive food stamps.

These results show some clear differences between the leavers and stayers. Recall that the caseload in Wisconsin dropped dramatically during the years 1995–1997, when we observed leavers and stayers. Although many of the stayers may have left welfare after 1996, this table shows that despite this, most stayers continue to use food stamps while most leavers do not. Acs and Loprest (this volume: Chapter 12) found quite a bit of variation in food stamps receipt after leaving welfare for the 11 reviewed studies. They found that 45 to 100 percent of leavers received food stamps in the first quarter after exit and that between 24 and 67 percent received food stamps any time in the year after exit, although most studies found between 55 and 70 percent received food stamps at least once in the exit period. In a study based on survey data from three cities (Boston, Chicago, and San Antonio), Moffitt and Roff (2000) found that 38 percent of leavers (or those who were on TANF at some point 2 years before being interviewed but not at the time of the interview) received food stamps when interviewed, although this varied across the three cities.

Table 13-9 also shows food stamps receipt stratified by past welfare receipt history. Looking only at leavers, we see wide differences between short-termers

TABLE 13-9 Food Stamps Receipt After Leaving: Leavers versus Stayers

	Percent	Percent Receiving Food Stamps by Quarter After Initial Exit (or since 3rd quarter 1996 for stayers)	Food Stamp	s by Quarte	r After Initi	al Exit (or s	ince 3rd qua	urter 1996 f	or stayers)			
	Exit Quarter	uarter	1st Q Pa	1st Q Postexit	2nd Q Postexit	ostexit	3rd Q Postexit	ostexit	4th Q Postexit	stexit	5th Q Postexit	ostexit
	s	Γ	s	r	S	Г	S	Г	S	Г	S	Г
Overall	94.3	90.3	93.4	52.0	87.1	46.2	81.7	43.0	77.2	40.3	72.6	37.4
By past welfare receipt history (ipt history	(7/89 to 7/95)	95)									
Short-termer	93.9	89.4	92.9	45.4	82.9	39.1	75.0	35.6	69.2	32.7	63.6	30.3
Long-termer	94.6	91.3	93.7	57.8	89.1	52.0	84.8	48.6	81.0	46.6	76.8	43.3
Cycler	93.5	6.68	92.5	52.4	83.2	48.0	76.4	45.6	70.7	42.0	65.3	38.5
By past earnings his	tory: Perce	ant of quarte	ers with ear	mings (1/89	to 7/95)							
Never worked	97.6	89.1	91.5	47.2	86.5	40.8	82.8	37.6	78.8	36.6	74.4	33.9
0 < x <= 25% 94.6 90.6 93.8 52.7 88.1	94.6	9.06	93.8	52.7	88.1	48.2	82.8	44.8	78.7	43.0	74.9	40.4
25 < x <= 50%	92.6	90.1	94.6	52.9	87.5	47.7	81.8	45.1	77.3	41.1	72.0	38.4
50 < x <= 75%	95.0	7.06	94.0	52.9	85.3	45.2	77.4	41.4	71.8	38.9	65.4	34.8
More than 75%	93.1	91.3	92.9	52.0	82.9	45.7	74.4	41.6	67.3	25.9	6.65	34.7

NOTE: S = Stayer. L = Leaver.

TABLE 13-10 Quarterly Medical Assistance Receipt After Leaving: Leavers versus Stayers

		Sam Sim Linea					ara dami	, , , , , , , , , , , , , , , , , , ,	(65)	
	1st Q Postexit	texit	2nd Q Postexit	ostexit	3rd Q Postexit	stexit	4th Q Postexit	stexit	5th Q Postexit	stexit
	S	Г	S	Г	S	Г	S	Г	S	Г
Overall	99.1	75.7	9.96	69.1	93.0	65.7	90.1	63.0	86.5	54.5
By past welfare receipt history (7/89 to 7/95)	ory (7/89 to 7/	95)								
Short-termer	8.66	71.5	94.5	64.0	89.1	60.2	84.7	57.0	80.2	48.9
Long-termer	100.0	79.5	9.76	73.8	94.7	70.5	92.4	0.89	89.4	59.2
Cycler	8.66	75.9	95.5	69.3	6.06	66.4	87.1	64.1	81.5	55.6
By past earnings history: per	rcent of quarters with earnings (1/89 t	rs with earni	ngs (1/89 to	to 7/95)						
Never worked	8.66	62.6	9.96	56.3	93.5	53.3	9.06	51.0	87.3	45.5
0 < x <= 25%	6.66	74.5	2.96	0.89	93.2	65.0	90.5	62.7	87.5	56.0
25 < x <= 50%	100.0	79.3	6.96	73.0	93.3	69.5	9.06	66.3	9.98	57.4
50 < x <= 75%	100.0	80.4	95.9	73.0	91.2	68.7	87.7	65.1	82.8	55.5
More than 75% of qtrs	7.66	79.2	96.2	72.7	91.9	69.3	86.5	41.4	80.4	52.9

NOTE: S = Stayer. L = Leaver.

and long-termers. In the first quarter after exit, 45 percent of short-termers received food stamps compared to 58 percent of long termers, which translates into a difference of nearly 30 percent. This gap persists throughout the postexit period. The percentage of cyclers who receive food stamps is consistently between the percentage of short-termers and long-termers who do. Moffitt and Roff (2000) divided their sample into "dependency" leavers and "non-dependency" leavers, where dependency leavers were dependent on welfare for part of the study period but were later off welfare, and nondependency leavers were either not dependent on welfare, or did not leave welfare. In contrast to findings here, they found few differences in usage of food stamps by dependency leavers, compared with nondependency leavers.

Those who never worked are the least likely to use food stamps after leaving. By the fifth quarter after exit, only 34 percent of those who had never worked received food stamps. This is in contrast to 40 percent of those who worked, up to 25 percent of the quarters prior to leaving. Again, this is a puzzling result that may be driven by the composition of the group that had never worked as described earlier. Excluding those who had never worked, more work experience is associated with less food stamps.

Medical assistance receipt by any member of the assistance unit after leaving is reported in Table 13-10.9 Like food stamps usage, medical assistance usage by leavers declines steadily through the post-exit quarters, while stayers' usage decreases much less substantially. By the fifth quarter after exit, 55 percent of leavers still received medical assistance, while 87 percent of stayers did. Medical assistance receipt also varies substantially by past welfare receipt history. Short-termers are consistently less likely to receive medical assistance after leaving than long-termers and cyclers. By the fifth quarter after exit, 49 percent of short-termers receive medical assistance and 59 percent of long-termers did. Cyclers are between these two; 56 percent received medical assistance after leaving in the fifth quarter. Moffitt and Roff (2000) found that 69 percent of dependency leavers received medical assistance after leaving welfare and compared with 67 percent of nondependency leavers.

Those who never worked are the least likely to receive medical assistance compared to those with at least some work experience. Of those with some work experience, no clear pattern in medical assistance receipt and work experience emerges. In the first three quarters after exit, those who worked the least were the least likely to receive medical assistance. In the fourth and fifth quarters after exit, those with the most work experience were least likely to receive benefits.

Table 13-11 reports the percentage of stayers and leavers who received neither AFDC, food stamps, nor medical assistance in the first quarter after they left welfare and again in the fifth quarter after leaving. In the first quarter after

⁹Use of medical assistance in the quarter of exit is not available.

TABLE 13-11 Public Assistance Receipt After Leaving

	Stayers	Leavers
	Percent Not Receiving A Medical Assistance in th Initial Exit (3rd quarter	ne First Quarter After
Overall	0.0	22.2
By past welfare receipt history (7/89 to	0 7/95)	
Short-termer	0.0	26.8
Long-termer	0.0	18.2
Cycler	0.0	21.7
By past earnings history: Percent of qu	earnings (1/89 to 7/9	95)
Never worked	0.0	33.7
$0 < x \le 25\%$	0.0	23.4
25 < x <= 50%	0.0	19.0
50 < x <= 75%	0.0	17.8
More than 75% of qtrs	0.0	19.0
	Percent Not Receiving A Medical Assistance in th Initial Exit (3rd quarter	ne Fifth Quarter after
Overall	27.3	43.2
By past welfare receipt history (7/89 to	o 7/95)	
Short-termer	18.5	49.3
Long-termer	9.7	38.3
Cycler	17.1	41.7
By past earnings history Percent of qu	arters with earnings (1/89 to 7/9	5)
Never worked	11.4	51.0
0 < x <= 25%	11.5	41.8
25 < x <= 50%	12.9	40.6
50 < x <= 75%	15.9	42.7
More than 75% of qtrs	18.7	45.2
	Mean Number of Month Stamps After Leaving (o stayers)	
Overall	10.29 (4.50)	7.03 (7.23)
By past welfare receipt history (7/89 to		
Short-termer	9.35 (4.83)	5.76 (6.72
Long-termer	10.76 (4.28)	8.04 (7.48
Cycler	9.40 (4.67)	7.36 (7.27
By past earnings history: Percent of qu		95)
Never worked	10.57 (4.63)	6.38 (7.24
0 < x <= 25%	10.48 (4.38)	7.37 (7.30
25 < x <= 50%	10.20 (4.39)	7.18 (7.19
50 < x <= 75%	9.61 (4.63)	6.79 (7.14
	9.07 (4.74)	6.90 (7.17

NOTE: Standard deviations reported in parentheses.

leaving welfare, a large majority of cases still received food stamps or medical assistance benefits. Only 22 percent of leavers did not receive food stamps, medical assistance, nor AFDC. All those who stayed on welfare received at least one of these three benefits.

In the fifth quarter after leaving welfare, the percentage of leavers who no longer received benefits nearly doubled, as 43 percent received neither AFDC, food stamps, nor medical assistance. In contrast, of those who stayed on AFDC, only 27 percent were not receiving any of these three public assistance benefits. Cancian et al. (1999) found that only 11 percent of welfare leavers did not receive any of these benefits in the first quarter and that only 30 percent did not receive any benefits in the fifth quarter after exit. Differences between the Cancian et al. (1999) results and the results presented here probably can be attributed to the exclusion of disappearers in the Cancian study.

To summarize Tables 13-8 to 13-11, receipt of public assistance benefits after leaving varies substantially across welfare receipt history, although it does not vary as much across earnings history. Short-term welfare users seem to be more independent of public assistance after leaving than long-term users. Only 18 percent of long-termers did not receive public assistance in the first quarter after leaving welfare compared to 27 percent of short-termers. Again, cyclers were in between; 22 percent of cyclers did not receive assistance in the first quarter after leaving welfare. A similar pattern holds for the fifth quarter after leaving welfare, but the differences across short-term and long-term status are even more pronounced. There is nearly a 30-percent difference in the proportion who do not receive benefits (49 percent for short-termers and 38 percent for longtermers). Again, this table shows wide differences in outcomes across different types of leavers. Cancian et al. (1999) also found that those with shorter spells were significantly less likely to return to TANF after leaving. Moffitt and Roff (2000) found few differences in public assistance benefit receipt between dependency leavers and nondependency leavers, although their measures of dependency are quite different than that of the short-termer, long-termer, and cycler distinctions made here.

Public benefit receipt of those who left welfare is also reported by past earning histories. Results here are not as anticipated. It was expected that those who had the most work experience would have better labor market outcomes after leaving than those with less work experience, and subsequently, would be less likely to rely on public assistance benefits. Instead, results in Table 13-11 show that leavers who had never worked prior to July 1995 were the least likely to receive public assistance benefits after leaving. This is consistent with findings in Tables 13-9 and 13-10. Again, the mixed composition of this group with no prior work experience drives these unusual findings. In both the first quarter and the fifth quarter after exit, there is not a clear pattern in the percentage not receiving public benefits by work experience among those who had worked prior to exit. In the first quarter after exit, those who had worked the least (0–25)

percent of the quarters) were the most likely to not receive benefits. Those who worked 50–75 percent of the quarters were the least likely to receive benefits. In the fifth quarter after exit, of those with prior work experience, those with the most work experience were the least likely to receive benefits. Those who worked 25-50 percent of the quarters prior to the exit period had the highest benefit receipt rates.

Employment, Earnings and Income Status After Leaving

A major goal of welfare reform was to increase employment and earnings of the low income and welfare populations. In this section, we examine common employment and earnings outcomes reported in studies of welfare leavers and stratify these outcomes by the past welfare receipt and past employment histories of the caseload. Employment rates, earnings, income, and a measure of dependency are reported in this section.

Employment Rates

The employment rates of welfare leavers and stayers are reported in Table 13-12, first on a quarter-by-quarter basis and overall for up to five quarters after each case left welfare, or since July 1996 for stayers. The table shows that two-thirds of the leavers were employed in the quarter in which they exited welfare while only one-third of stayers were employed in the third quarter of July 1996. Employment rates of leavers fell slightly after exit, but remained fairly consistent at just over 60 percent. The employment rates of stayers, however, grew over time (except in the third quarter after exit), until nearly half the stayers were employed in the fifth quarter after the exit period. The last column shows the percentage who were ever employed since leaving. Overall, of those who stayed on welfare, 65 percent of them were employed for at least one quarter. This is in comparison to 77 percent of leavers who were ever employed after leaving welfare.

Cancian et al. (1999) found that 82 percent of leavers were ever employed within a year after leaving and found quarter-by-quarter employment rates of between 72 and 75 percent. ¹⁰ Acs and Loprest found that employment rates in the first quarter after exit across 11 welfare leaver studies ranged between 47 and 64 percent. They also found that between 62 and 75 percent ever worked after leaving welfare, although the 11 studies reviewed followed the leavers for different lengths of time.

That the employment rates of leavers do not rise over time may be a point of concern if the 40 percent who are not working are looking for work and not

 $^{^{10}}$ The Cancian et al. (1999) figures exclude disappearers.

TABLE 13-12 Quarterly and Overall Employment Rates of Welfare Leavers and Stayers

		Percen	Percent Employed by Quarter After Initial Exit (or since 3rd quarter 1996 for stayers)	yed by (Juarter /	After Ini	tial Exit	(or sinc	e 3rd qu	arter 19	96 for si	tayers)			
		Exit Q	Exit Quarter	1st Quarter Postexit	arter it	2nd Quarter Postexit	it	3rd Quarter Postexit	it	4th Quarter Postexit	arter it	5th Quarter Postexit	arter it	Ever Employed	yed
	% Who Left Welfare	S	Г	S	Г	S	Г	S	Г	S	Г	S	Г	S	Г
Overall	48.1	33.3	9.59	37.9	63.0	43.5	63.0 43.5 61.2	41.3		45.3	61.4	61.1 45.3 61.4 49.3 61.3	61.3	64.8 76.6	9.92
By past welfare re-	By past welfare receipt history (7/89 to 7/95)	5)													
Short-termer	61.1	34.3	63.6	40.3	6.09	45.0	59.6	43.3	59.7	47.3	59.6	51.5	58.7	67.0	74.4
Long-termer	37.4	32.2	65.8	36.2	63.6	42.2	61.6	39.9	6.09	44.0	61.2	48.0	61.7	63.1	76.7
Cycler	62.2	38.4	69.2	43.5	66.1	48.2	64.1	46.5	64.5	49.0	65.7	53.1	62.9	70.5	81.3
By past earnings h	By past earnings history: % of quarters with earnings (1/89 to 7/95)	h earnin	gs (1/89	to 7/95	_										
Never worked	34.2	14.5	31.0	18.6	29.7	22.7	29.1	23.1	29.9	26.2	30.1	29.9	30.2	40.0	41.6
0 < x <= 25%	42.6	31.3	58.6	35.0	54.4	41.4	52.9	38.5	52.1	42.4	52.4	47.0	52.3	65.4	70.9
25 < x <= 50%	52.9	4.4	72.8	50.7	70.4	56.0	68.3	52.1	68.4	57.6	8.89	61.4	9.89	78.3	85.3
50 < x <= 75%	8.09	49.7	8.62	54.8	77.8	61.3	75.5	0.09	75.1	63.7	76.0	6.99	75.6	82.4	89.7
More than 75%	72.5	65.7	88.9	70.4	87.5	76.2	85.7	73.9	85.8	75.8	85.0	7.67	85.3	91.4	95.0

NOTES: S = Stayer. L = Leaver.

finding it, or if all leavers are having a hard time keeping jobs and are cycling between employment and unemployment. The 40 percent who are not working also could be relying on the income of a partner or spouse and not actively looking for work or not working for other reasons that cannot be uncovered with these data.

Employment rates by work history status vary widely. Those with the most work experience are nearly three times as likely to be employed as those with no work experience. A clear pattern between work experience and employment status emerges; those with more work experience are more likely to be employed. This is true for both leavers and stayers and in each quarter after the exit period. It is also the case that the group with no work experience is the least likely to work after exit. This group is disproportionately composed of legal immigrants, who may be less likely to work in jobs covered by the UI system, and cases without an eligible adult. When no eligible adults are in the AFDC case, reported earnings are those of an adult who lives with the child but who is not part of the AFDC case and who typically has been either sanctioned from AFDC or has a disability and receives SSI. Overall, although only about 40 percent of those who have never worked prior to the exit period were ever employed after the exit period, employment in the exit period was nearly universal for those with the most work experience, as 95 percent of leavers and 91 percent of stayers were ever employed.

Cancian et al. (1999) stratify the percentage of quarters worked in the postexit period by work experience in the 2 years prior to the exit period and also find wide variations in employment. These employment rates vary as expected; that is, those who worked the least in the preexit period also worked the least in the postexit period and those who worked the most in the preexit period worked the most in the postexit period. Those who had not worked in the 2 years prior to exit worked 56 percent of the quarters in the postexit period and those who worked every quarter in the 2 years prior to exit worked 93 percent of the quarters in the postexit period. If prior work experience is a determinant of the likelihood a leaver finds a job (and it seems to be), then we would expect that a caseload composed of those with more work experience to have better employment rates after leaving than a caseload composed of those with little work experience. Results here suggest how widely those employment rates may vary.

Differences in employment rates by past welfare receipt history are not as wide. However, the differences are somewhat surprising. Cyclers consistently have the highest employment rates. Long-termers have the next highest employment rates, and short-termers have the lowest employment rates, although they are usually very near the rates of long-termers. It is not so surprising that cyclers have the highest employment rates, because this group moves on and off welfare more frequently and may have employment experience from the times off welfare. It is somewhat surprising that long-termers have higher employment rates than short-termers, since long-termers had the least employment experience, as

reported in Table 13-6. However, these descriptive statistics do not account for age, which is probably positively associated with being a long-termer and with higher employment rates.

Although Cancian et al. (1999) only tracked welfare receipt prior to the exit period for 2 years, they found similar results. For leavers who returned to welfare (they did not report employment rates for all leavers), employment rates of those who had received AFDC for 7-18 months before the exit period, 65 percent were employed. This is relative to 62 percent of those who had only received AFDC for 6 months prior to the exit period, and 63 percent of those who had received AFDC for more than 18 months before the exit period. For continuous leavers, Cancian et al. (1999) found that those who had received AFDC for more than 18 months had employment rates of 73 percent, but that those who received welfare between zero and 18 months prior to the exit period all had similar employment rates at 76 percent.

Earnings

The success of former welfare recipients in staying off welfare also depends on how much they can earn while working. Table 13-13 shows mean and median quarterly earnings of welfare leavers and stayers over the first four quarters after exiting welfare, or since the beginning of the third quarter of 1996 for stayers. Overall, the mean quarterly earnings of leavers in the first year after exit was \$1,642 and the median was \$1,311.\frac{11}{11}\$ This translates into roughly \$6,000 per year (using the median), which is still considerably below the poverty line for a family consisting of a mother and two children, which was \$12,278 in 1996 and \$12,641 in 1995. The mean quarterly earnings of stayers is \$786 and the median is \$199.

Breaking the caseload down by past welfare receipt, we see only small differences in earnings across short-termers, long-termers, and cyclers. Cyclers have the highest mean and median earnings (\$1,663 for the mean and \$1,374 for the median), which is in contrast to findings from survey data in Moffitt (this volume: Chapter 14), which found that cyclers had the lowest earnings off welfare compared to short-term and long-term welfare recipients. As Table 13-13 shows, long-termers earn nearly as much as cyclers on average (\$1,657 for the mean and \$1,330 for the median). Short-termers have the lowest earnings (\$1,616 for the mean and \$1,266 for the median). Stevens (2000) found that short-termers had the highest earnings over the decade for which earnings were observed, long-termers had the lowest earnings off welfare, and cyclers had earnings between the two groups. Stevens also notes that all three types of recipients have earnings that are well below a reasonable self-sufficiency level.

¹¹Those who do not appear in UI records in a quarter are assumed to have no earnings. Therefore, many observations have zero earnings. The next table shows mean and median earnings, not including quarters in which the case does not appear in UI records.

TABLE 13-13 Mean and Median Quarterly Earnings Over the Year Following Exit

	Year After Exiting W	Mean and Median Quarterly Earnings in the Year After Exiting Welfare (or since July 1996 for stayers)	
	Stayers	All Leavers	
Overall			
Mean	786.1	1,642.1	
Median	199.0	1,311.0	
By past welfare receipt history (7/	/89 to 7/95)		
Short-termer			
Mean	870.8	1,616.2	
Median	284.8	1,266.0	
Long-termer			
Mean	741.0	1,657.0	
Median	157.6	1,330.0	
Cycler			
Mean	889.5	1,662.9	
Median	325.7	1,373.5	
By past earnings history: Percent	of quarters with earnings (1/89 to 7/9	95)	
Never worked			
Mean	420.9	777.2	
Median	0	0	
0 < x <= 25%			
Mean	673.1	1,293.1	
Median	148.7	743.5	
25 < x <= 50%			
Mean	1,010.7	1,796.5	
Median	577.2	1,565.1	
50 < x <= 75%			
Mean	1,219.6	2,086.2	
Median	853.8	2,018.2	
More than 75% of qtrs			
Mean	1,783.7	2,656.8	
Median	1,552.8	2,537.9	

Interestingly, of those who stay on welfare, long-termers have the lowest quarterly earnings of the three groups. The long-termers who leave welfare may be decidedly better off than the long-termers who stay on welfare in terms of employment and earnings potential.

Breaking the caseload down by past work experience again shows a clear distinction in earnings between those with no work experience and those with much work experience. For both leavers and stayers, those with no work experience had the lowest earnings. In fact, most were not working or at least not in jobs

covered by UI, as the median earnings of this group are zero. On the other hand, those leavers who worked more than 75 percent of the quarters prior to the exit period had fairly high earnings (\$2,657 for the mean and \$2,538 for the median). In general, those with more experience had higher quarterly earnings.

Table 13-14 shows the same statistics, except that quarterly earnings are averaged only over quarters in which earnings were reported in the UI system (missing quarters were not counted as zeros). The mean quarterly earnings of leavers over quarters in which they were employed are \$2,387 and the median

TABLE 13-14 Mean and Median Quarterly Earnings Over the Year Following Exit Only in Quarters When Leaver Worked

Mean and Median quarterly earnings in the year after exiting welfare (or since July 1996 for stayers).

	Stayers	All Leavers	
Overall			
Mean	1,678.1	2,386.5	
Median	1,449.8	2,225.8	
By past welfare receipt history (7/8	9 to 7/95)		
Short-termer			
Mean	1,803.3	2,414.0	
Median	1,559.2	2,244.4	
Long-termer			
Mean	1,628.0	2,402.8	
Median	1,411.8	2,271.0	
Cycler			
Mean	1,701.7	2,295.2	
Median	1,413.9	2,096.6	
By past earnings history: Percent of	f quarters with earnings (1/89 to 7/9	95)	
Never worked			
Mean	1,611.3	2,175.3	
Median	1,386.4	1,977.8	
0 < x <= 25%			
Mean	1,484.7	2,100.7	
Median	1,240.0	1,880.6	
25 < x <= 50%			
Mean	1,733.0	2,348.5	
Median	1,515.4	2,191.5	
50 < x <= 75%			
Mean	1,930.3	2,548.6	
Median	1,713.4	2,396.8	
More than 75% of qtrs			
Mean	2,350.3	2,966.1	
Median	2,109.3	2,782.3	

was \$2,226. This translates to around \$9,500 per year, which is still below the poverty threshold for a family of three. The earnings of stayers are also much higher when we exclude those who do not have UI earnings reports. Overall, counting only the quarters in which stayers were employed, the mean quarterly earnings were \$1,678 and the median was \$1,450.

Cancian et al. (1999) also report median earnings across quarters worked after leaving welfare. Overall they find a median for all leavers of \$2,417, which is higher than the median found here. Findings from 11 leaver studies show mean quarterly earnings over the first year of between \$2,300 and \$3,600 (calculations based on data presented in Acs and Loprest, this volume: Chapter 12). Results from Wisconsin reported in this study are in the lower range of those found in Acs and Loprest. It is not clear if differences are due to regional variations in earnings, caseload composition differences across studies, or methodological differences.

Counting only quarters in which leavers worked, short-termers had the highest mean quarterly earnings (\$2,414 for short-termers compared to \$2,403 for long-termers and \$2,295 for cyclers), but long-termers had the highest median quarterly earnings (\$2,271 compared to \$2,244 for short-termers and \$2,097 for cyclers). The differences in earnings between long-termers and short-termers in quarters during which they worked (Table 13-14) are smaller than the differences across all quarters when disappearers are included (Table 13-13). Cancian et al. (1999) break out median quarterly earnings by the number of months of welfare receipt for 2 years prior to the exit period. In doing so, they find that those who had more months of benefit receipt in the preexit period had the highest median quarterly earnings. We find a similar result for median quarterly earnings of welfare leavers, but little difference between short-termers and long-termers. For mean quarterly earnings, short-termers had greater earnings. Earnings across past work history again show that those with more work experience have higher earnings. However, those who had never worked prior to the exit period had slightly higher earnings than those who had worked less than 25 percent of the time (a median of \$1,978 for the never worked category compared to \$1,881 for the more than zero but less than 25 percent category). Again, this group of leavers who have never worked seems to be an odd collection, as they have slightly higher earnings than other leavers who have a bit more work experience. Otherwise, the table shows that for both leavers and stayers, work experience before the exit period is associated with higher earnings after the exit period, and the differences are substantial.¹³

¹²Their figure includes a fifth quarter after exit. Furthermore, our figure includes only case heads over the age of 21 in 1995, while their figure includes case heads over the age of 18 in 1995.

¹³Earnings for those who returned in the months and quarters in which they received welfare will necessarily be lower because their eligibility for benefits is tied to earnings and income. Table 13-B2 in Appendix 13-B shows mean and median quarterly earnings for leavers during quarters in which no welfare benefits were received.

Income

Table 13-15 shows total income calculated on a quarterly basis as the sum of earnings, AFDC/TANF benefits, and food stamps benefits for leavers and stayers. This does not include any income from other household members, any income unreported to the UI system, nor any nonearned income. Mean and median quarterly income for leavers and stayers across past welfare and work receipt are examined in this table.

TABLE 13-15 Mean and Median Quarterly Income Over the Year Following Exit (income = AFDC benefits + food stamps + earnings in first four quarters after exit)

1	Mean and median quarterly income in the year after exiting welfare (or since July 1996 for stayers).	
Stayers	All Leavers	

	Stayers	All Leavers
Overall		
Mean	2,301.5	2,003.6
Median	2,184.6	1,864.0
By past welfare receipt history (7/8	9 to 7/95)	
Short termer		
Mean	2,224.9	1,894.8
Median	2,072.8	1,720.8
Long termer		
Mean	2,339.7	2,088.7
Median	2,240.3	1,988.2
Cycler		
Mean	2,224.5	2,037.1
Median	2,070.7	1,903.0
By past earnings history: Percent of	f quarters with earnings (1/89 to 7/9	95)
Never worked		
Mean	2,062.4	1,119.1
Median	1,914.9	509.5
0 < x <= 25%		
Mean	2,260.6	1,702.8
Median	2,176.7	1,434.8
25 < x <= 50%		
Mean	2,433.9	2,170.4
Median	2,328.1	2,065.2
50 < x <= 75%		
Mean	2,498.9	2,393.7
Median	2,343.7	2,391.2
More than 75% of qtrs		
Mean	2,958.5	2,963.6
Median	2,728.8	2,918.1

Overall, stayers had higher income levels than leavers in the first year following exit. The median overall income of stayers was \$2,185 compared to \$1,864 for leavers, which is a 17-percent difference. Although stayers had lower earnings than leavers, stayers were more likely to receive AFDC/TANF and food stamps benefits than leavers. These benefits appear to be making the difference in overall income levels.

Long-termers had the highest median incomes over all leavers (\$1,988). Median incomes of cyclers (\$1,903) were only slightly lower than incomes of long-termers. Short-termers had the lowest overall median income (\$1,721). Long-termers had higher average earnings than short-termers and also were slightly more likely to return to welfare. This probably explains the even wider difference in total incomes (as compared to differences in earnings) between these groups. Moffitt and Roff (2000) found that dependency leavers had lower household incomes than nondependency leavers, but that they received more income from child support and food stamps but less from earnings and income of other household members (data for this study were collected through surveys so measures of household income were collected).

The more work experience prior to the exit period, the higher the mean and median incomes of leavers and stayers were. Interestingly, leavers with the most work experience had higher overall mean and median incomes than stayers. This is the only subgroup for which leavers' incomes were higher than stayers' incomes. The earnings of this group of leavers were quite high and make up for the difference in benefit receipt of stayers with similar work experience.

Dependency

Table 13-16 attempts to measure dependency for leavers and stayers. The measure of dependency used in this case is the ratio of earnings to total income in the first year after leaving, or since July 1996 for stayers. Earnings over the year are summed and divided by total income (earnings + AFDC + food stamps) in the year to get an earnings-to-total-income ratio. Those with higher ratios are less dependent on government assistance.

Overall, the mean earnings-to-income ratio (ETI ratio) for leavers was nearly 70 percent compared to only 26 percent for stayers. This is a striking difference but not surprising given that stayers continued to receive benefits during the exit period, had lower overall earnings, and were more likely to receive food stamps throughout the year after the exit period. Looking at the subgroups of leavers by welfare receipt history, as expected, short-termers had the highest ETI ratios (73 percent) and long-termers have the lowest (66 percent), which is about a 10 percent difference. Cyclers are between long-termers and short-termers, with a mean ETI ratio of 70 percent.

ETI ratios vary significantly by past work experience. Again, those with the most work experience had higher ETI ratios (85 percent for those with the most

TABLE 13-16 Dependency After Leaving Welfare: Mean Ratio of Earnings to Total Income in the First Year After Exit by Leaver Status

Mean Ratio of Earnings to Income Over the First Year After Initial Exit (from 3rd quarter 1996 to 3rd quarter 1997 for stayers)

	Stayers	All Leavers
Overall	0.26 (0.31)	0.69 (0.37)
By past welfare receipt history (7/89	to 7/95)	
Short-termer	0.30 (0.33)	0.73 (0.36)
Long-termer	0.24 (0.29)	0.66 (0.38)
Cycler	0.31 (0.32)	0.70 (0.35)
By past earnings history: Percent of	quarters with earnings (1/89 to 7/9	95)
Never worked	0.14 (0.25)	0.44 (0.44)
0 < x <= 25%	0.23 (0.29)	0.62 (0.39)
25 < x <= 50%	0.34 (0.31)	0.73 (0.34)
50 < x <= 75%	0.40 (0.32)	0.80 (0.29)
More than 75% of qtrs	0.52 (0.31)	0.85 (0.23)

NOTES: Earnings from UI wage records. Total income = earnings + TANF benefits + food stamps. Standard deviations reported in parentheses.

work experience compared to 44 percent for those with no work experience). Also notable is the difference between leavers and stayers that had worked more than 75 percent of the quarters prior to the exit period. The difference in the ETI ratio of these two groups is very wide as only half of the incomes of the group of stayers with the most work experience came from earnings, while 85 percent of income from leavers with similar work experience came from earnings. Comparing stayers to leavers, only the group with no work experience had worse dependency ratios than even the group of stayers with the most work experience.

Cases With Multiple Barriers to Self-Sufficiency

In an attempt to estimate a lower bound on the outcomes of leavers, AFDC recipients that may face the most barriers to self-sufficiency were identified and their employment, earnings, and public assistance usage after leaving welfare were examined. High-barrier cases were identified by their education level, amount of time spent on welfare prior to the exit period, presence of young children, and employment experience prior to the exit period. ¹⁴ A case was clas-

¹⁴Other characteristics, of course, could be used to identify high-barrier cases (SSI status for mother and child, for example). Different definitions were examined and are reported in the Table 13-B3 in Appendix 13-B.

sified as a "high-barrier" case if all of the following conditions applied: (1) no high school diploma; (2) presence of at least one child under the age of 5; (3) received welfare for more than 48 months in the period between July 1989 and July 1995; and (4) worked fewer than four quarters between January 1989 and July 1995. Of the total of 48,216 cases, 1,226 cases (or 2.5 percent) met each of these conditions and were classified as "high-barrier" cases. Of these 1,226 cases, only 307, or 25.1 percent, left welfare. This is in comparison to 48 percent of the entire caseload. Nearly 15 percent of high-barrier leavers were sanctioned from AFDC compared to 8 percent of all other leavers. Table 13-17 shows the outcomes of those classified as high-barrier cases who left welfare and compares these outcomes to all other leavers. If these high-barrier cases are truly those who face the most barriers to self-sufficiency, then examining their outcomes can give us a sense of how bad the outcomes of some leavers may be, or in other words, a lower bound on outcomes of leavers.

The first five rows examine public assistance usage for leavers. In general, the high-barrier cases have higher levels of public assistance usage than all other leavers. For some public assistance receipt outcomes, the difference between high-barrier leavers and all other leavers are sizable. However, for most outcomes, the differences are not as bad as one might expect. The high-barrier leavers were much more likely to return to AFDC than all other leavers. Forty-three percent of high-barrier leavers returned to welfare after leaving compared to only 29 percent of all other leavers. This is a sizable difference of about 48 percent. About 20 percent of the worst off leavers received AFDC for three or more quarters after leaving. However, fewer than half of these high-barrier cases returned to AFDC in the exit period. This result is a favorable indicator in that even among the worst off cases, dependency on cash assistance decreased during this period.

However, this group of high-barrier cases still received public assistance from either food stamps, AFDC, or Medicaid. In the first quarter after exit, only 18 percent of high-barrier leavers did *not* receive public assistance. In the fifth quarter after exit, this grew to 30 percent. In both the first and fifth quarters, the percentage of high-barrier cases not receiving assistance was 13 percentage points lower than the percentage of all other leavers.

Food stamp usage after leaving is very high for the high-barrier cases. Eightyone percent received food stamps for at least 1 month after leaving. This is, however, not greatly different from the percentage of all other leavers who received food stamps after leaving, which was 71 percent. High-barrier leavers

¹⁵In March 1996, Wisconsin's Pay for Performance policy went into effect, which included full-family sanctions for those who did not participate in 20-40 hours per week of the Job Opportunities and Basic Skills (JOBS) program (Cancian et al., 1999).

TABLE 13-17 A Comparison of Leavers With Multiple Barriers to All Other Leavers

Outcomes	High-Barrier Leavers ^a	All Other Leavers
Total number of leavers	307	22,900
Percent of sample who are leavers	25.1^{b}	48.7^{c}
Percent of leavers who were sanctioned	14.7	7.8
Number of quarters received AFDC after leaving		
0	56.7	70.8
1-2	13.4	13.9
3-4	18.2	11.0
4+	11.7	4.4
Percent not receiving AFDC, food stamps, or medical assistance in the 1st quarter after exit	18.2	22.2
Percent not receiving AFDC, food stamps, or medical assistance in the 5th quarter after exit	30.3	43.4
Percent who ever received food stamps after leaving	80.5	70.7
Mean number of months received food stamps after leaving	9.7	7.0
# of quarters worked after leaving		
0	40.7	23.1
1-2	20.5	13.6
3-4	15.3	19.3
4+	23.5	44.0
Quarterly earnings over first year after exit (including quarters without earnings)		
Mean	819.7	1,653.8
Median	137.3	1,329.2
Quarterly earnings over first year after exit (excluding quarters without earnings)		
Mean	1,735.3	2,393.2
Median	1,593.5	2,235.2
Quarterly income from earnings, AFDC, and food stamps in the fir	st year after exi	t
Mean	1,523.2	2,010.0
Median	1,351.1	1,874.0

^aHigh-barrier cases are those who, as of July, 1995: did not have a high school diploma, had at least one child under the age of 5, had received AFDC for more than 4 years between July 1989 and July 1995, and had worked four or fewer quarters between January 1989 and July 1989.

received food stamps, on average, for nearly 3 more months than all other leavers (9.7 months compared to 7.0 months).

The employment and earnings status of high-barrier leavers is not as encouraging. Nearly 41 percent of high-barrier leavers did not have earnings in the quarters following the exit period. This is relative to only 23 percent of all other

bPercent of all cases designated "high-barrier cases" who left AFDC.

^cPercent of all cases not designated "high-barrier cases" who left AFDC.

leavers who did not have earnings during the postexit period. In general, the high-barrier leavers worked fewer quarters than all other leavers. Twenty-one percent of high-barrier leavers worked only one or two quarters after leaving compared to only 14 percent for all other leavers. On the other hand, although 63 percent of all other leavers worked at least three quarters after leaving welfare, only 38 percent of the high-barrier leavers did.

The earnings and incomes of high-barrier leavers are substantially lower than those of all other leavers. Mean quarterly earnings in the year following exit for high-barrier leavers (including quarters in which the case did not work) were \$820 and median quarterly earnings were \$137. For all other leavers, mean quarterly earnings were \$1,654 and median quarterly earnings were \$1,329. Excluding quarters in which a case did not work, the mean quarterly earnings of high-barrier leavers are \$1,735 and the median quarterly earnings are \$1,593. This median translates into annual earnings of \$6,372.

Mean and median total income from earnings, AFDC, and food stamps are also reported. Results show that combined income from public assistance and earnings of high-barrier leavers is not too low relative to all other leavers, but is still much below the poverty line. The mean income of high-barrier leavers in the first year after exit is \$1,523 and the median is \$1,351. This is relative to a mean of \$2,010 for all other leavers and a median of \$1,874. Annualized, these medians translate into \$5,404 for high-barrier leavers and \$7,496 for all other leavers.

Overall, the low earnings and employment rates of the group of high-barrier leavers are certainly of concern. However, this group is not, at least relative to all other leavers, extraordinarily different in terms of public assistance usage after leaving. In fact, most do not return to AFDC over the year to 2 years for which we observe them after leaving. It is important to note that these results are for welfare leavers and that 75 percent of high-barrier cases did not leave welfare. The outcomes of these high-barrier *stayers* are probably worse than the outcomes of high-barrier *leavers*.

MULTIVARIATE ANALYSIS OF THE PROBABILITY OF LEAVING AFDC, THE PROBABILITY OF EMPLOYMENT AFTER LEAVING AND EARNINGS AFTER LEAVING

The results presented thus far have only shown bivariate relationships between outcomes of welfare leavers and stayers and their past welfare receipt and work experience. This section assesses the importance of past welfare receipt and past earnings history, controlling for other demographic and economic variables on outcomes. The probability of leaving welfare and the probability of employment after leaving—controlling for programmatic, demographic, and economic factors—are estimated. Earnings of welfare leavers in the first year after exit are also estimated.

The Probability of Leaving Welfare

Table 13-18 shows probit estimates of the probability of leaving welfare for all July 1995 AFDC recipients. Estimates from two models that use different measures of past welfare receipt history are shown. The first model uses average spell length (ASL) and ASL-squared along with a series of dummy variables

TABLE 13-18 Probit Estimates of the Probability of Leaving Welfare (N = 48,213)

	Mode	el 1	Mode	el 2
Independent Variable	Sign	m.e.	Sign	m.e.
Average spell length	_a	-0.006		
Average spell length squared	+a	0.000		
Total # of spells of AFDC receipt = 1	_a	-0.05		
Total # of spells of AFDC receipt = 2 or 3	+	0.018		
Total # of spells of AFDC receipt= 4 or more	+	0.036		
(reference group is those with no spells of AFDC receipt)				
Long-termer			_a	-0.104
Cycler (reference group is short-termers)			+	0.007
# quarters with earnings before leaving	+a	0.011	$+^a$	0.012
Age of case head	+ ^a	0.008	$+^a$	0.008
Age of case head squared	\underline{a}	-0.000	\underline{a}	-0.000
Black	_a	-0.058	_a	-0.630
Hispanic (reference group is white)	+	0.008	+	0.009
No high school diploma	\underline{a}	-0.037	\underline{a}	-0.037
At least some college (reference group is high school diploma)	+a	0.027	$+^a$	0.027
Age of youngest child	+ ^a	0.008	$+^a$	0.007
# of children under age 5	_	-0.038	-a	-0.039
# of children over age 5	_a	-0.021	_a	-0.024
Legal immigrant	+	0.014	+	0.015
Other adult present in case	+ ^a	0.038	+a	0.040
Milwaukee County resident	_a	-0.194	_a	-0.206
Resident of other urban county (reference group is rural				
county resident)	_a	-0.057	_a	-0.060
Child receives SSI	_a	-0.025	_a	-0.028
Mother receives SSI	_a	-0.325	_a	-0.326
Sanctioned case	+ ^a	0.029	+ ^a	0.030
Unemployment rate in county July 1995	_a	-0.007	_a	-0.006
Intercept	$+^b$		+	
Log likelihood (restricted log likelihood is –24,069.95)	-21.	105.04	-21.2	203.53
Likelihood ratio index	,	0.123	,	0.119
Percent of observations predicted correctly		67.4		67.1

^aCoefficient is statistically significant at the 5-percent level.

bCoefficient is statistically significant at the 10-percent level.

m.e. = marginal effect

categorizing the number of spells of AFDC receipt the case had in the preexit period. The second model uses the long-termer, short-termer and cycler distinctions to synthesize the two concepts of spell length and number of spells. Both include a variable for the number of quarters for which the case had UI earnings during the preexit period, and controls for demographic characteristics of the case and for local economic conditions. The sign of the coefficient and the marginal effect of each variable on the probability of leaving welfare are given.

Model 1 uses ASL and its square and dummy variables for the number of spells of AFDC receipt to characterize past welfare receipt history. ¹⁶ The categories of number of spells are: zero spells (reference group), one spell, two to three spells, and four or more spells.

Results show that longer average spell lengths are negatively associated with the probability of leaving welfare, but the marginal effect of a 1 month change in ASL has a small effect on the probability of leaving. The relationship is nonlinear, however, as ASL gets longer, the rate at which the probability of leaving decreases starts to slow. Those who had one spell are significantly less likely to leave AFDC than those with no prior spell. However, the size of the marginal effect is small, as a shift from no spell to one spell decreases the probability of leaving by only 0.5 percentage points compared to 14 percentage points. Those with two or more spells are not significantly more or less likely to leave welfare than those with no prior spells. These results suggest that when the length of time on welfare is accounted for, the number of spells of receipt does not have a big impact on the probability of leaving welfare. Those with one spell of AFDC receipt are significantly less likely to leave welfare than those with no prior spells, but those with more than one spell are no more or less likely to leave welfare. Cancian et al. (1999) found consistent results. They found that those with spells of over two years long were significantly less likely to leave welfare and that those with more than one spell were significantly less likely to leave welfare than those with only one spell.

Results from the second model corroborate this conclusion. In the fourth model, the spell length and spell number concepts of welfare receipt are combined into the cycler, long-termer, and short-termer classifications. The short-termers are used as the reference group in this model. Results show that long-termers are significantly less likely to leave welfare than short-termers, but there are no differences between cyclers and short-termers in the probability of leaving welfare. Long-termer status decreases the probability of leaving welfare by 10 percentage points, which is a sizable reduction.

¹⁶Other explanatory variables will not be discussed. Their signs are consistent across all models. All are significant predictors of the probability of leaving welfare except for quadratic terms for the age of the case head in the second model, the dummy variable for Hispanic ethnicity (in all four models), the number of children under age 5 (in the third model), and the legal immigrant dummy variable (in the third and fourth models).

To summarize estimations of the probability of leaving welfare, the distinction between long-term AFDC recipients and other types of AFDC recipients is an important one as long-termers are significantly less likely to leave AFDC. The estimates also show that the number of preexit quarters with earnings is consistently a strong and positive predictor of the probability of leaving AFDC across all four models.

Probability of Employment After Leaving

Table 13-19 presents probit estimates of the probability of being employed for at least one quarter in the year after leaving welfare. Only those cases that left welfare are included. We expect that, controlling for all else, those with more work experience prior to leaving are more likely to be employed after leaving welfare. We also expect that those with shorter welfare receipt histories are more likely to be employed after leaving than those with longer welfare receipt histories.

Results presented in the first model are contrary to expectations in that both long-termers and cyclers are more likely to be employed after leaving welfare than short-termers. This controls for the age of the case head, the age and number of children, the SSI status of leavers, and other variables that also might be associated with employment. The results are, however, consistent with findings from Cancian et al. (1999).

In the next model, the long-term, short-term, and cycler distinctions were "unpacked"; that is, variables for ASL and ASL-squared along with the dummy variables for the number of spells were included. Results are similar to those in the first model in that longer spells of benefit receipt are positively associated with the probability of employment after leaving. However, the relationship is nonlinear as the coefficient on the variable for average spell length squared is negative and significant. As spell length increases, the marginal increase in the probability of employment gets smaller.

Instead of using the cycler distinction for measuring the frequency for which a case goes on and off AFDC, the second model includes a series of dummy variables for the number of spells of AFDC receipt, as explained earlier. In the first model, cyclers (three or more spells regardless of spell length) were significantly more likely to be employed within a year after leaving welfare than short-termers. In the second model, we see that relative to those with no prior AFDC spells, those with one to three spells of AFDC receipt are significantly less likely to be employed after leaving welfare. Those with more than three spells are no less likely to be employed than those with no prior AFDC spells. The results of the first two models do not conflict with each other because their reference groups are different. The reference group in the second model includes those with no prior AFDC receipt, which may include those who are slightly better off than short-termers because they have not had to rely on AFDC prior to July 1995 (the

TABLE 13-19 Probit Estimates of the Probability of Employment in the First Year After Leaving Welfare (N=18,322)

	Mode	1 1	Mode	1 2	Mode	1 3
Independent Variable	Sign	m.e.	Sign	m.e.	Sign	m.e.
Long-termer	+ ^a	0.034				
Cycler (reference group is short-termers)	$+^a$	0.013				
Average spell length			$+^a$	0.002		
Average spell length squared			_a	-0.000		
One spell of receipt			_a	-0.040		
Two or three spells of receipt			_a	-0.031		
Four or more spells of receipt (reference group			_	-0.023		
is no prior spells)						
No earnings prior to leaving & short-term welfare recipient					-	-0.006
Some earnings prior to leaving & long-term welfare recipient					+**	0.034
No earnings prior to leaving & long-term welfare recipient					+	0.012
Some earnings prior to leaving & cycler					+a	0.014
No earnings prior to leaving & cycler					_	-0.055
(reference group for this series is short-termers						
with earnings prior to leaving welfare)						
# quarters with earnings before leaving	+a	0.010	$+^a$	0.011	+ ^a	0.010
Age of case head	_a	-0.007	_a	-0.007	_a	-0.007
Age of case head squared	_a	0.000	+	0.000	+	0.000
Black	+	0.004	_	0.002	+	0.004
Hispanic (reference group is white)	$+^a$	0.028	$+^a$	0.028	+	0.029
No high school diploma	_	-0.003	_	-0.003	_	-0.003
At least some college (reference group is high school diploma)	+**	0.011	+	0.010	+b	0.011
Age of youngest child	+a	0.002	$+^a$	0.002	$+^a$	0.002
# of children under age 5	_	-0.003	_	-0.004	_	-0.003
# of children over age 5	$+^a$	0.012	+a	0.011	+a	0.012
Legal immigrant	+	0.001	+	0.002	+	0.002
Other adult present in household	_	-0.006	_	-0.005	_	-0.006
Milwaukee County resident	+	0.000	_	-0.002	+	0.000
Resident of other urban county (reference						
group is rural county resident)	_	-0.005	_	-0.005	_	-0.005
Child receives SSI	_	-0.007	_	-0.008	_	-0.007
Mother receives SSI	_a	-0.219	_a	-0.218	_a	-0.219
Sanctioned case	_a	-0.045	_a	-0.044	_a	-0.045
Unemployment rate in county in 1996	_a	-0.010	_a	-0.010	_a	-0.010
Left AFDC 4th quarter 1995	+	0.009	+	0.008	+	0.009
Left AFDC 1st quarter 1996	+	-0.001	_	-0.002	_	-0.001
Left AFDC 2nd quarter 1996 (reference is left AFDC 3rd quarter 1995)	+	-0.004	-	-0.005	-	-0.004

continues

TABLE 13-19 Continued

	Model 1	Model 2	Model 3
Independent Variable	Sign m.e.	Sign m.e.	Sign m.e.
Intercept	+a	+a	+a
Log likelihood (restricted log likelihood is			
-6,471.46)	-5,605.20	-5,597.75	-5,604.41
Likelihood ratio index	0.134	0.135	0.134
Percent of observations predicted correctly	88.4	88.4	88.4

aCoefficient is statistically significant at the 5-percent level.

short-termer group includes some with no prior AFDC receipt, but it also includes some with some prior AFDC receipt). The result that those with at least four prior spells of receipt are no less likely to find employment after leaving than those with no prior AFDC receipt and the positive and significant sign on the cycler variable in Model 1 are still a bit perplexing. One hypothesis is that those who cycle on and off welfare also cycle between employment and unemployment. Because this group has some work experience, its members may have a relatively easier time finding jobs after leaving. This hypothesis is only supported to the extent that those with many spells are more likely to be employed after leaving than those with a few spells. However, those with a few AFDC spells (between one and three) are less likely to find employment after leaving than those with no prior AFDC spells.

The third model attempts to flesh out the results in the first two models with respect to welfare receipt history. The model includes a series of dummy variables for the earnings and welfare receipt history of leavers. The third model combines the welfare receipt and work history variables. The sample is categorized into six groups: short-termers with no prior work experience, short-termers with at least one quarter of prior work experience, long-termers with no work experience, long-termers with some work experience, cyclers with no work experience, and cyclers with some work experience. The reference group consists of short-termers with some work experience.

Results from this model are useful in explaining the peculiar results in Models 1 and 2. Those with long-term welfare receipt histories and at least one quarter of work experience prior to leaving still have higher employment probabilities than short-termers with work experience. However, employment rates of long-termers with no prior work experience are not significantly different from the employment rates of short-term recipients with prior work experience. Likewise, cyclers with some prior work experience have higher probabilities of employ-

^bCoefficient is statistically significant at the 10-percent level.

m.e. = marginal effect.

ment after leaving welfare than short-termers with some work experience. However, cyclers with no work experience do not have different employment rates than short-termers with some work experience. This group of leavers with long-term welfare receipt histories clearly have characteristics or faces economic or policy conditions that are associated with increased employment compared to those who have used welfare less. These results need further investigation.

For all three models of the probability of employment, those with more work experience are more likely to be employed after leaving welfare, as expected. The coefficient is positive and strongly significant. A one quarter increase in prior work experience increases the probability of employment after leaving by 1 percentage point. One other variable of interest is the dummy variable for whether or not a case was sanctioned from benefit receipt. In all three models, sanctioned cases were significantly less likely to be employed than nonsanctioned cases. The marginal effect of a sanctioned case decreases the probability of leaving welfare by more than 4 percentage points. This is as expected and is initial evidence that sanctioned cases may have a tough time finding employment.

Earnings in the Year After Welfare Exit

Table 13-20 presents Tobit estimates of leavers' earnings in the first year after exiting AFDC. Again, the relationship between preexit welfare receipt and preexit earnings on postexit earnings is of key interest. In these estimates, a measure of average quarterly earnings in the years prior to the exit period are included in this model as an additional measure of prior work history.

Results show that long-termers have higher earnings than short-termers even after controlling for other demographic, programmatic status, and local economic conditions. Status as a long-term AFDC user is positively associated with earnings after leaving and is statistically significant. This result holds even after controlling for the age of the leaver, prior work experience; and average quarterly earnings prior to leaving welfare, which is surprising because it is contrary to initial predictions that long-termers would have more barriers to self-sufficiency and have lower earnings after leaving. Further explanations for this result should be explored. It is possible that there are compositional differences in the welfare dependency groups that are not observed with these data. Cyclers, however, do not have higher earnings than short-termers. In combination with results from the first model in Table 13-19, although cyclers are more likely to be employed after leaving welfare than short-termers, they do not have earnings that are significantly different from short-termers.

The second model uses ASL and its square as measures of previous welfare benefit receipt history. It also uses the series of dummy variables for the number of prior welfare spells as measures of the degree of cycling on and off welfare. Results show that longer spells of benefit receipt are associated with higher earnings, but that the longer the spells of receipt, the slower the increase in

TABLE 13-20 Tobit Estimates of Earnings in the First Year After Leaving Welfare (N = 17,293)

	Model 1		Model 2	
Independent Variable	β	m.e.	β	m.e.
Intercept	1.85	0.29^{a}	2.00	0.29^{a}
Long-termer	0.31	0.03^{a}		
Cycler (reference group is short-termers)	0.03	0.04		
Average AFDC spell length			0.02	0.003^{a}
Average AFDC spell length squared			-0.00	0.000^{a}
Total # of spells =1			-0.34	0.08^{a}
Total # of spells=2 or 3			-0.36	0.08^{a}
Total # of spells=4 or more			-0.26	0.09^{a}
Average quarterly earnings before leaving	0.32	0.02^{a}	0.33	0.02^{a}
# Quarters with earnings before leaving	0.05	0.00^{a}	0.05	0.002^{a}
Age of case head	-0.03	0.02^{b}	-0.03	0.02^{a}
Age of case head squared	-0.001	0.002	-0.00	0.00
Black	0.04	0.04	0.03	0.04^{a}
Hispanic (reference group is white)	0.27	0.06^{a}	0.27	0.06^{a}
No high school diploma	-0.28	0.03^{a}	-0.27	0.03^{a}
At least some college (reference group is high school diploma)	0.39	0.03^{a}	0.39	0.03^{a}
Age of youngest child	0.00	0.00	0.002	0.005
# of children under age 5	-0.02	0.02	-0.02	0.02
# of children over age 5	0.14	0.02^{a}	0.13	0.02^{a}
Legal immigrant	0.51	0.19^{a}	0.53	0.19^{a}
Other adult present in household	-0.07	0.03^{a}	-0.07	0.03^{a}
Milwaukee County resident	0.45	0.04^{a}	0.43	0.04^{a}
Resident of other urban county (reference group is rural county resident)	0.08	0.04^{b}	0.07	0.04^{a}
Child receives SSI	-0.18	0.05^{a}	-0.18	0.05^{a}
Mother receives SSI	-1.89	0.09^{a}	-1.88	0.09^{a}
Sanctioned case	-0.52	0.05^{a}	-0.52	0.05^{a}
Unemployment rate in county in 1996	-0.10	0.02^{a}	-0.10	0.02^{a}
Left AFDC 4th quarter 1995	0.03	0.03	0.03	0.03
Left AFDC 1st quarter 1996	0.01	0.04	0.00	0.00
Left AFDC 2nd quarter 1996 (reference is left AFDC 3rd quarter 1995)	-0.14	0.03^{a}	-0.15	0.03^{a}
Scale parameter	1.64	0.01^{a}	1.64	0.01^{a}
Log likelihood	-30,993	3.14	-30,971	.07
Number of censored cases	2,227		2,227	

 $[^]a$ Coefficient is statistically significant at the 5-percent level. b Coefficient is statistically significant at the 10-percent level.

m.e. = marginal effect.

earnings. These results are consistent with the first model. The results are also consistent with findings from the 1995 cohort of leavers in Cancian et al. (1999), but not with earnings of the 1997 cohort of leavers from Cancian et al. (2000b).

Each of the coefficients on the dummy variables for the number of spells of benefit receipt are negative and statistically significant. Those with one spell of benefit receipt, those with two or three spells of benefit receipt, and those with four or more spells have significantly lower earnings than those with no prior spells of benefit receipt. The coefficient is the largest for those with two or three spells (-0.36).

The coefficients on average quarterly earnings and on total number of quarters worked in the years prior to leaving are positive and statistically significant. Those with higher average earnings in the preexit period had higher earnings after leaving. Likewise, those who worked more quarters prior to leaving welfare had higher earnings after leaving welfare, although the size of the coefficient is smaller than the size of the coefficient on average earnings prior to leaving welfare. Both results are as expected and indicate that a key component of labor market success after leaving welfare is work experience prior to leaving welfare.

Predictions of Outcomes for High-Barrier Cases

This section uses the coefficient estimates from the models predicting the probability of leaving welfare, the probability of employment after leaving, and earnings after leaving to predict each of these outcomes for different definitions of "high-barrier" cases. ¹⁷ Seven definitions of high-barrier cases are examined. The first is the same definition used earlier—cases that had no high school diploma, received welfare for at least 48 months in the preexit period, fewer than four quarters of earnings in the preexit period, and had at least one child under the age of 5. The rest of the definitions build this basic definition. They are:

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Definition 2 = Definition 1 + the case head is on SSI.
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Definition 3 = Definition 1 + the case includes a child on SSI.

Definition 4 = Definition 1 + the case lives in Milwaukee County.

Definition 5 = Definition 1 + the case head is black.

Definition 6 = Definition 1 + the case head is black and lives in Milwaukee County.

Definition 7 = Definition 1 + the case head was sanctioned from AFDC.

For each outcome, the coefficients from the model that uses the long-termer, short-termer and cycler distinction are used. Table 13-21 shows the mean predicted probability of the three outcomes computed for cases that qualify as high-

 $^{^{17}}$ Cancian et al. (2000b) conduct similar simulations, although definitions of high-barrier cases differ from those presented here.

TABLE 13-21 Predicted Outcomes for Cases That Face Multiple Barriers to Self-Sufficiency

A	All Cases	High-Barrier Definition 1^a	High-Barrier Definition 2^b	High-Barrier Definition 3^c	High-Barrier Definition 4^d	High-Barrier Definition 5^e	High-Barrier Definition 6 ^f	High-Barrier Definition 7g
Number of cases 34 Percent of total sample 17 Number of leavers 17 Mean predicted probability of leaving welfare 17 Mean predicted probability of employment after leaving welfare 16 Mean predicted quarterly earnings after leaving welfare 17	34,726 17,294 48.7 (19.6) 88.3 (11.2) 1,929.9 (645.3)	1,410 4.1 344 23.9 (11.9) 75.7 (15.0) 1,224.1 (407.9)	173 0.5 26 7.5 (4.9) 29.5 (9.5) 293.5 (144.7)	304 0.9 65 21.5 (11.6) 72.5 (16.5) 1,046.0 (381.6)	1,051 3.0 192 19.0 (7.0) 75.4 (15.8) 1,329.0 (407.6)	877 2.5 150 18.9 (7.8) 74.7 (16.2) 1,246.2 (408.0)	792 2.3 125 17.5 (6.2) 74.0 (17.0) 1,276.7 (408.7)	138 0.4 45 28.7 (11.4) 72.3 (7.1) 953.5 (230.0)

NOTES: Cases with missing data for explanatory variables were eliminated. Predictions are based on the actual values of explanatory variables for each case. Standard deviations reported in parentheses.

aDefinition 1 = No high school diploma; received AFDC for at least 4 years between 7/89 and 7/95; had fewer than four quarters with earnings between 1/89 and 7/95; had at least one child under the age of 5.

 $^{^{}h}$ Definition 2 = Definition 1 + case head is on SSI. c Definition 3 = Definition 1 + case includes a child on SSI.

dDefinition 4 = Definition 1 + case lives in Milwaukee County.

 $^{^{}e}$ Definition 5 = Definition 1 + case head is black.

fDefinition 6 = Definition 1 + case head is black and lives in Milwaukee County. 8Definition 7 = Definition 1 + case head was sanctioned from AFDC.

barrier cases under these definitions. The first column shows the mean predicted outcomes for all cases in the sample as a reference.

Probability of Leaving Welfare for High-Barrier Cases

For the entire sample, the mean predicted probability of leaving welfare is nearly 49 percent. This is close to the 48 percent of the caseload that actually left welfare during the time period. Under different definitions of high-barrier cases, the probability of leaving welfare varies substantially. Under the basic highbarrier definition (Definition 1), the probability of leaving is 24 percent or about half the probability of leaving for the entire sample. Across different definitions of high-barrier cases, by far, cases that receive SSI have the lowest probability of leaving welfare. The mean predicted probability of leaving welfare for this group (Definition 2) is only 7.5 percent. For those high-barrier cases that include a child who receives SSI (Definition 3), the probability of leaving welfare is not as low as cases where the mother receives SSI. The mean predicted probability of leaving welfare for this group is 21.5 percent. For those who are high-barrier cases and who live in Milwaukee County the mean predicted probability of leaving welfare is 19 percent. This is nearly identical to the mean predicted probability of leaving for high-barrier cases that are also black (Definition 5). High-barrier cases that are black and live in Milwaukee County (Definition 6) have a slightly lower mean probability of leaving welfare, 17.5 percent.

These results suggest that high-barrier cases are much less likely to leave AFDC than those who do not face these barriers. This is especially true for those who receive SSI payments. High-barrier cases who are black and live in Milwaukee County also have a lower probability of leaving welfare than other high-barrier cases. Those high-barrier cases with a child who receives SSI payments are only slightly less likely to leave welfare than all high-barrier cases.

Probability of Employment in the First Year After Leaving

The next row shows the mean predicted probability of ever being employed in the first four quarters after leaving. These predictions are based on the coefficient estimates in Model 1 in Table 13-19, and are computed only for those who leave welfare. First, the overall mean predicted probability of employment after leaving is 88.3 percent. For the basic definition of high-barrier cases, the mean probability of employment is 75.7 percent, which is about a 14-percent difference from the overall mean probability. This is still a sizable difference, but not nearly as big as the difference in the mean predicted probabilities of leaving welfare for high-barrier and nonhigh-barrier cases. Furthermore, for nearly every additional definition of high-barrier cases, the mean probabilities of employment are approximately 75 percent. There are some exceptions. First, those high-barrier cases that receive SSI (Definition 2) have quite different mean predicted prob-

abilities of employment than the overall sample and than the basic high-barrier definition. The mean predicted probability of employment after leaving for this group is only 29.5 percent. Second, those with a child on SSI (Definition 3) and those who were sanctioned from AFDC (Definition 7) have slightly lower mean predicted probabilities of leaving (72.5 percent for Definition 3 and 72.3 percent for Definition 7). These results indicate that even sanctioned high-barrier cases and high-barrier cases with SSI-eligible children have fairly high employment rates after leaving welfare and do not appear to have trouble finding employment after leaving welfare.

Mean Predicted Quarterly Earnings After Leaving Welfare

The last row in Table 13-21 shows mean predicted quarterly earnings for leavers under the different definitions of high-barrier cases. These means are based on Tobit coefficient estimates from Model 1 of Table 13-20.

The mean predicted quarterly earnings of all leavers (column 1) in the first year after exit are \$1,930. The mean quarterly earnings of high-barrier cases (Definition 1) are \$1,224, which translates into a nearly 37-percent difference. Different high-barrier cases do better than this, however. The mean predicted earnings of those from Milwaukee County (Definition 4) are \$1,329, higher than mean predicted earnings of the basic high-barrier cases. This result is probably a result of wage differences between Milwaukee and other areas of the state. High-barrier cases who are black (Definition 5) also have higher earnings (\$1,246) than other high-barrier cases, although their means are not as high as the mean earnings for high-barrier cases from Milwaukee. Accordingly, those who are black and live in Milwaukee (Definition 6) have predicted earnings that fall between the predicted earnings of those from Milwaukee County (Definition 4) and those who are black (Definition 5). Their mean predicted earnings are \$1,277.

The predicted earnings of those with other barriers are not as high, however. Again, those high-barrier cases that receive SSI (Definition 2) are the worst off. Their mean predicted earnings are just \$293.5 per quarter. Again, only 26 observations fall into this category. High-barrier cases that have a child who is eligible for SSI also have low mean earnings, at \$1046. Finally, sanctioned high-barrier cases have low mean earnings, too, at \$953.5. Their mean is less than half of that for the entire sample of leavers and 22 percent lower than the basic high-barrier cases. So although the employment rates of sanctioned cases were not that different than other high-barrier cases, there are substantial earnings differences between sanctioned high-barrier cases and other high-barrier cases, and between sanctioned leavers and all other leavers.

Table 13-21 illustrates that it is likely that certain high-barrier cases will have a difficult time making it on their own. High-barrier cases in general are

¹⁸This mean is based on 26 observations, however.

much less likely to leave welfare than other cases. Although their employment rates are not vastly different from all other leavers, their earnings are substantially different. High-barrier cases that are eligible for SSI are likely to have even greater problems making it on their own, according to these predictions. For other types of high-barrier cases, employment may not be a significant problem for them; however, earnings do seem to be a problem.

Results found here should supplement similar simulations conducted in Cancian et al. (2000b), where much wider differences in predicted outcomes between high-barrier cases and low-barrier cases were found. The Cancian et al. definitions of high-barrier cases are more restrictive than definitions used here.

CONCLUSIONS

The purpose of this paper is to illustrate the importance of characterizing the composition of the caseload at the time the welfare leavers sample is drawn. The paper also aims to exemplify one method of standardizing results across different types of leavers with different benefit receipt and work histories in order to make the studies more comparable across time and across areas. In general, we find that past welfare receipt history matters a great deal for outcomes, but not always as expected. We also find that those with more work experience prior to leaving were more likely to leave welfare and were much more successful in gaining employment and earnings after leaving welfare.

We described the composition of the caseload during the time the leavers sample was drawn according to their prior work and benefit receipt. Results presented in that section show that a significant portion of the caseload received AFDC benefits for at least 5 of the 6 years in the preobservation period. Most of the cases on AFDC in 1995 had fewer than two spells of benefit receipt in the preexit period. Only 14 percent had three or more spells of receipt. The caseload was divided into three groups: long-termers, short-termers, and cyclers. Under these definitions, 55 percent of the caseload were long-termers, 31 percent were short-termers, and 14 percent were cyclers. The caseload was also broken down by past work experience, as measured by the percentage of quarters in the preexit period with UI earnings. Twenty percent of the caseload did not work at all in the preexit period, 60 percent worked at least one quarter but no more than half the quarters, and 25 percent worked for more than half the quarters. Crossing work history with welfare receipt history, we found that those who had received benefits the longest had the least amount of work experience. Short-termers had the most work experience. Cyclers had the least amount of work experience.

We also showed outcomes by past benefit receipt and work experience. The first outcome examined was the proportion of cases that left welfare. Results showed that higher percentages of cyclers and short-termers left welfare than long-termers. Results also showed that higher portions of leavers were found in the groups with the most work experience. For those who left welfare, two sets of

outcomes were examined: benefit receipt after exit (return to AFDC, food stamps, or Medicaid) and employment status and earnings after exit. Results show that the cycler, short-termer, and long-termer distinction is an important distinction for benefit receipt outcomes. Long-termers were much more likely than shorttermers and cyclers to return to welfare, and a higher proportion of long-termers continued to receive food stamps and Medicaid after leaving than short-termers. Benefit receipt outcomes after leaving did vary by work experience prior to leaving welfare, but the differences were not large. On the other hand, employment and earnings outcomes after leaving varied substantially across prior work experience strata. As expected, those who had worked more prior to leaving welfare had higher employment rates and higher earnings after leaving. Employment and earnings outcomes also varied by prior AFDC benefit receipt, but not as drastically. Surprisingly, long-termers had better employment outcomes than short-termers. Long-termers were more likely to be employed after leaving and their earnings were higher after leaving than short-termers. Cyclers' employment rates and earnings did not differ greatly from those of long-termers.

The final part of the paper examines how important past benefit receipt distinctions and work experience distinctions are for these outcomes when other background characteristics of the cases are controlled. The probability of leaving welfare and the probability of ever being employed in the year after leaving welfare were estimated. Earnings after leaving were also predicted for welfare leavers. The primary finding in this section is that prior work experience was a consistently strong predictor of success. The percentage of quarters worked in the preexit period was positively associated with the probability of leaving welfare and the probability of employment after leaving. Quarters worked and average wages in the preexit period were both positive and strong predictors of quarterly earnings after leaving welfare.

We also found that past welfare receipt distinctions were important predictors of the probability of leaving welfare. Short-termers were significantly more likely to leave welfare than long-termers and in general, results consistently show that those who had received AFDC longer were less likely to leave AFDC. The cycler distinction was not a strong predictor of the probability of leaving welfare, although there is some evidence that those with one spell of benefit receipt were less likely to leave welfare than those with no prior spells of receipt.

The probability of being employed after leaving is, surprisingly, positively related to the length of time spent on welfare prior to the preexit period. Average spell length and long-termer status were both positive and strong predictors of the probability of employment after leaving welfare. For this outcome, the cycler distinction was an important predictor of employment as cyclers were significantly more likely to be employed than short-termers.

Spell length is positively associated with earnings after leaving as well. Long-termer status is associated with higher earnings after leaving. Furthermore, average spell length is positively associated with earnings after leaving. The number of welfare receipt spells were significant predictors of earnings after leaving. The coefficient for each category of number of spells (one spell, two or three spells, or four or more spells) is negative and statistically significant compared to those with no prior spells.

The results that long-termers worked more quarters and had higher earnings after leaving than short-termers and cyclers is contrary to expectations that previous dependency levels would be negatively correlated with employment outcomes. A good explanation for these results is not clear.

In summary, we conclude that in examining the outcomes of welfare leavers, it is important to characterize the caseload by their past work experience and by their past benefit receipt history because outcomes vary widely across different work experience and benefit receipt backgrounds. Work history background is especially important, we find, as the outcomes vary greatly according to different work experience groups. In terms of past benefit receipt history, the long-term versus short-term distinction is an important one. Distinctions by the number of spells of receipt show mixed results—sometimes this distinction matters, sometimes it does not.

REFERENCES

Acs, G., and P. Loprest

2001 Initial Synthesis Report of the Findings of ASPE's "Leavers" Grants. Washington, DC: The Urban Institute. Available: http://aspe.hhs.gov/hsp/leavers99/synthesis01/

Bane, M.J., and D.T. Ellwood

1994 Welfare Realities: From Rhetoric to Reform. Cambridge, MA: Harvard University Press. Blank, R.M., and P. Ruggles

1994 Short-term recidivism among public-assistance recipients. *American Economic Review* 84(2):49-53.

Cancian, M.R., Haveman, T. Kaplan, and B. Wolfe

1999 Post-Exit Earnings and Benefit Receipt Among Those Who Left AFDC in Wisconsin. Institute for Research on Poverty Special Report No. 75.

Cancian, M.R., Haveman, T. Kaplan, I. Rothe, and B. Wolfe

2000a Before and After TANF: The Utilization of Noncash Public Benefits by Women Leaving Welfare in Wisconsin. Institute for Research on Poverty.

Cancian, M.R., Haveman, D.R. Meyer, and B. Wolfe

2000b Before and After TANF: The Economic Well-Being of Women Leaving Welfare. Institute for Research on Poverty Special Report No. 77.

Moffitt, R.A.

1992 Incentive effects of the U.S. welfare system: A review. Journal of Economic Literature 30: 1-61.

Moffitt, R.A., and J. Roff

2000 The Diversity of Welfare Leavers. Background paper to Policy Brief 00-02. Welfare, Children, and Families: A Three-City Study. Working Paper 00-01. Baltimore, MD: Johns Hopkins University.

Moffitt, R. A., and D. Stevens

2001 Changing Caseloads: Macro Influences and Micro Composition. Unpublished paper presented at conference, Welfare Reform Four Years Later: Progress and Prospects, Federal Reserve Bank of New York, November 17.

National Research Council

- 1999 Evaluating Welfare Reform: A Framework and Review of Current Work. R. A. Moffitt and M.L. Ver Ploeg, eds. Commission on Behavioral and Social Sciences and Education. Committee on National Statistics. Washington, DC: National Academy Press.
- 2001 Evaluating Welfare Reform in an Era of Transition. Panel on Data and Methods for Measuring the Effects of Changes in Social Welfare Programs, Robert A. Moffitt and Michele Ver Ploeg, Editors. Committee on National Statistics, Division of Behavioral and Social Sciences and Education. Washington, DC: National Academy Press.

Stevens, David W.

2000 Welfare, Employment and Earnings. Memorandum prepared for the Panel on Data and Methods for Measuring the Effects of Changes in Social Welfare Programs, Committee on National Statistics. University of Baltimore, MD, October.

APPENDIX 13-A

DESCRIPTION OF LEAVERS AND OUTCOMES ACROSS DIFFERENT DEFINITIONS OF LEAVERS

In this appendix, the definition of a leaver is modified to see how sensitive the composition and outcomes of leavers are to the definition used in the paper. Specifically, the requirement that a leaver must have stopped receiving AFDC for 2 consecutive months to be considered a leaver is made more restrictive. We try two additional definitions; first, that a leaver must have discontinued receiving benefits for 3 consecutive months to be considered a leaver, and second, that a leaver must have discontinued receiving benefits for 6 consecutive months to be considered a leaver. These definitions were operationalized as follows:

All cases received AFDC in July 1995. Leavers under the 2-month definition stopped receiving AFDC for 2 consecutive months between August 1995 and July 1996. (June 1996 was the last month a case may have received AFDC and still be considered a leaver if the case did not receive welfare in July and August of 1996.) Leavers under the 3-month definition stopped receiving AFDC for 3 consecutive months between August 1995 and July 1996. (June 1996 was the last month a case may have received AFDC and still be considered a leaver if the case did not receive welfare in July, August, and September of 1996.) Leavers under the 6-month definition stopped receiving AFDC for 6 consecutive months between August 1995 and July 1996. (June 1996 was the last month a case may have received AFDC and still be considered a leaver if the case did not receive welfare in July through December 1996.)

Using these definitions, Table 13-A1 shows how the composition of the leaver and stayer groups vary across the three definitions. Table 13-A2 shows how some key outcomes of leavers vary across the different definitions. A brief summary of these two tables is reported here.

With a more restrictive definition of a leaver, a smaller portion of the caseload, not surprisingly, qualifies as a leaver. With the 3-month definition, 45.1 percent are leavers compared to 48.1 percent for the 2-month definition. For the 6-month definition, only 41.1 percent are classified as leavers. The characteristics of leavers under the more restrictive definition change only slightly. There are few differences in the characteristics of 2-month leavers and 3-month leavers. The differences are very small across all the demographic and past work and welfare receipt history variables. There are small differences in the demographic composition of 6-month leavers and 2-month leavers. A higher proportion (2.5 percentage points) of 6-month leavers are white than 2-month leavers. Six-month leavers (38.7 percent compared to 42.4 percent). Six-month leavers are slightly more likely to be short-termers than 2-month leavers (41.2 percent compared to 39.1 percent) and slightly less likely to be long-termers (40.7 percent compared to 42.9 percent). Six-month leavers have, in general, spent a little less time on

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	Leaver = 2 Months off	fonths off	Leaver = 3 Months off	Ionths off	Leaver = 6 Months off	lonths off
Characteristic	Leaver	Stayer	Leaver	Stayer	Leaver	Stayer
Total number	23,207	25,009	21,742	26,474	19,796	28,420
Percent of sample	48.1	51.9	45.1	54.9	41.1	58.9
Race/ethnicity						
% black	32.2	48.1	31.7	52.2	29.7	52.2
% Hispanic	6.4	7.1	6.5	7.1	6.4	7.1
% white	61.4	44.8	61.8	40.7	63.9	41.7
Age of case head						
% <26	37.1	35.5	37.1	35.6	37.1	35.7
% 27-31	25.2	23.7	25.1	23.8	25.1	23.9
% 32-41	30.9	32.2	30.8	32.2	30.8	32.1
% 42+	8.9	8.6	6.9	8.4	7.0	8.2
Education of case head						
% less than high school	36.1	50.2	35.4	50.0	34.4	49.7
% high school diploma	45.3	37.7	45.6	37.9	46.0	38.2
% some college	18.6	12.1	19.0	12.1	19.6	12.2
County of residence						
Milwaukee County	42.4	65.3	40.7	65.4	38.7	65.1
Other urban county	35.6	24.1	36.5	23.9	37.6	24.0
Rural	22.0	10.6	22.7	10.6	23.6	10.8
Percent with child on SSI	8.1	13.1	7.9	13.0	7.6	12.9
Age of youngest child						
% 0 to 1 years	27.1	29.2	27.2	28.9	27.4	28.7
% 2 to 4 years	31.4	31.0	31.2	31.2	31.1	31.3
% 5 to 11 years	29.7	29.9	29.6	30.0	29.4	30.0
% 12 or older	11.8	6.6	12.0	6.6	12.1	6.6
						continues

TABLE 13-A1 Characteristics of Welfare Leavers Under Different Definitions of "Leaver"

TABLE 13-A1 Continued

	Leaver $= 2$ Months off	onths off	Leaver $= 3$ Months off	lonths off	Leaver = 6 Months off	lonths off
Characteristic	Leaver	Stayer	Leaver	Stayer	Leaver	Stayer
Total number	23,207	25,009	21,742	26,474	19,796	28,420
Percent of sample	48.1	51.9	45.1	54.9	41.1	58.9
Welfare History (7/89 to 7/95)						
% short-termer	39.1	23.1	40.0	23.2	41.2	23.6
% long-termer	42.9	2.99	41.9	66.3	40.7	65.4
% cycler	18.2	10.2	18.1	10.5	18.1	11.0
Percent of time on welfare (7/89 to 7/95)						
$0 \le x < 25\%$ of time	23.5	11.3	24.3	11.3	25.3	11.5
$25 \le x < 50\%$ of time	20.4	14.3	20.7	14.3	21.1	14.5
$50 \le x < 100\%$ of time	43.7	45.4	43.2	45.7	42.3	46.2
Always on	12.4	29.0	11.8	28.6	11.3	27.8
Mean AFDC spell length 7/89 to 7/95 (in months)	27.5	41.2	26.9	40.9	26.3	40.4
	(23.2)	(25.2)	(23.0)	(25.2)	(22.8)	(25.2)
Percent of quarters with earnings (1/89 to 7/95)						
Never worked	14.0	25.1	14.2	24.3	14.4	23.5
0 < x <= 25%	30.0	37.6	29.6	37.5	29.3	37.2
25 < x <= 50%	28.0	23.1	27.9	23.4	27.7	23.9
50 < x <= 75%	17.7	10.6	17.9	10.8	18.2	11.2
More than 75% of quarters	10.3	3.6	10.3	3.9	10.5	4.2

TABLE 13-A2 Outcomes of Welfare Leavers Under Different Definitions of "Leaver"

	Leaver = 2 Months off	Ionths off	Leaver $= 3$ Months off	onths off	Leaver = 6 Months off	onths off
Characteristic	Leaver	Stayer	Leaver	Stayer	Leaver	Stayer
Total number	23,207	25,009	21.742	26,474	19,796	28,420
Percent of sample	48.1	51.9	45.1	54.9	41.1	58.9
Number returned to AFDC	6,753		4,831		2,753	
Percent returned to AFDC	29.1	N/A	22.2	N/A	13.9	N/A
Average earnings over 4 quarters after leaving ^a	1,642.1	786.1	1,677.7	804.2	1,733.2	825.4
	(1,628.3)	(1,124.6)	(1,658.5)	(1,127.8)	(1,686.0)	(1,136.4)
Median earnings over 4 quarters after leaving ^{a}	1,311.0	199.0	1,371.9	226.5	1,459.9	259.8
Average income from earnings, AFDC, food	2,193.6	2,301.5	1,980.1	2,304.3	1,956.0	2,298.9
stamps, over 4 quarters after leaving ^a	(1,556.3)	(1,128.1)	(1,636.9)	(1,125.9)	(1,673.3)	(1,129.8)
Median income over 4 quarters after leaving ^a	1,864.0	2,184.6	1,817.1	2,189.1	1,761.6	2,180.3
Number of quarters with earnings after $exit^b$						
% did not work	22.8	33.8	22.6	28.9	21.8	28.0
% worked 1-3 quarters	22.4	32.5	24.3	37.2	23.6	37.0
% worked 4+ quarters	54.7	37.7	53.1	33.9	54.6	35.0

NOTE: Standard deviations reported in parentheses.

^aDoes not include disappearers.

^bPlease note that one more quarter postexit is observed under the 2- and 3-month definitions than under the 6- month definition. The latest quarter a 2- or 3-month leaver could have exited would be third quarter 1996, whereas the latest quarter a 6-month leaver could have exited is fourth quarter 1996.

welfare prior to the exit period than 2-month leavers. This is as expected, because the group of 6-month leavers is probably composed of cases that are more self-sufficient than the group of 2-month leavers. There are only negligible differences in the work histories of 2-month, 3-month, and 6-month leavers.

As expected, 6-month leavers have better outcomes than 3-month and 2-month leavers. Only 13.9 percent of 6-month leavers returned to AFDC, compared to 22.2 percent of 3-month leavers and 29.1 percent of 2-month leavers. The mean and median earnings in the first year after exit of 6-month leavers are higher than those of 3-month and 2-month leavers. The mean and median earnings in the first year after exit for 6-month leavers are \$1,733 and \$1,460. For 3-month leavers, the mean and median are \$1,678 and \$1,372. For 2-month leavers, the mean and median are \$1,642 and \$1,311. Somewhat surprisingly, 6-month leavers did not work much more than 2-month leavers. However, one less quarter after exit is observed for 6-month leavers than for 2-month leavers, so little emphasis is put on this result.

APPENDIX 13-B SUPPLEMENTARY TABLES

TABLE 13-B1 Distributions of Long-termer, Short-termer, and Cycler Welfare Histories by Alternative Definitions (percent distribution)

	Definition 1 ^a	Definition 2^b	Definition 3 ^c	Definition 4 ^d	Definition 5 ^e
Full sample					
Long-termer	76.7	67.8	61.2	55.3	36.9
Short-termer	9.4	18.3	24.9	30.8	49.2
Cycler	13.9	13.9	13.9	13.9	13.9
By leaver status					
Stayers					
Long-termer	84.2	77.8	72.4	66.7	47.7
Short-termer	5.7	12.1	17.5	23.1	42.1
Cycler	10.2	10.2	10.2	10.2	10.2
Leavers					
Long-termer	68.7	57.0	49.1	42.9	25.2
Short-termer	13.3	25.0	32.9	39.1	56.8
Cycler	18.0	18.0	18.0	18.0	18.0

NOTE: All cyclers are those who have had three or more spells regardless of average spell length.

 $^{^{}a}$ Definition 1: Average spell length -6 months=short-termer; average spell length >6 = long-termer

 $[^]b\mathrm{Definition}$ 2: Average spell length -12 months=short-termer; average spell length >12 = long-termer.

 $[^]c$ Definition 3: Average spell length -18 months=short-termer; average spell length >18 = long-termer.

 $[^]d$ Definition 4: Average spell length -24 months=short-termer; average spell length >24 = long-termer

 $[^]e$ Definition 5: Average spell length -36 months=short-termer; average spell length >36 = long-termer.

TABLE 13-B2 Earnings of Leavers in Quarters Without AFDC Receipt (includes disappearers)

	1st Quarter After Exit	2nd Quarter After Exit	3rd Quarter After Exit	4th Quarter After Exit	5th Quarter After Exit
All leavers					
N	19,912	18,803	18,987	19,375	19,815
Mean earnings	1,370	1,656	1,745	1,827	1,860
Median earnings	1,245	1,381	1,290	1,385	1,382
Short-term welfare user					
N	8,610	7,766	7,832	7,955	8,113
Mean earnings	1,575	1,647	1,687	1,741	1,787
Median earnings	1,017	1,117	1,127	1,154	1,185
Long-term welfare user					
N	8,264	7,729	7,795	7,955	8,139
Mean earnings	1,697	1,762	1,801	1,893	1,927
Median earnings	1,399	1,408	1,421	1,524	1,528
Cycler					
N	3,545	3,308	3,360	3,465	3,563
Mean earnings	1,656	1,702	1,752	1,871	1,874
Median earnings	1,381	1,352	1,338	1,553	1,482

TABLE 13-B3 Different Definitions of High-Barrier Cases

	Definition 1 ^a	Definition 2 ^b	Definition 3 ^c	Definition 4 ^d	Definition 5 ^e	Definition 6 ^f
Number	1,410	421	1,723	361	2,484	3,292
Percent of						
total sample	2.9	2.1	3.6	0.7	5.2	6.8
Number of						
leavers	344	27	443	87	506	1,225
Percent in high-barrier definition who						
left AFDC	24.4	6.4	25.7	24.1	20.4	37.2

^aDefinition 1 = Basic high-barrier definition: Did not finish high school, received AFDC for more than 48 months in 72 months prior to exit, had at least one child under the age of 5, worked four or fewer quarters in the preexit period.

bDefinition 2 = Same as #1 except did not work at all in the preexit period.

^cDefinition 3 = Same as #1 except worked fewer than eight quarters in the preexit period.

dDefinition 4 = Same as #1 except had at least one child under the age of 1.

^eDefinition 5 = Only qualification is case head received SSI.

fDefinition 6 = Only qualification is one child in case received SSI.